

32/645/2017-SPV Division
Government of India
Ministry of New & Renewable Energy

Atal Akshay Urja Bhawan
Lodhi Road, New Delhi
Date: 17.01.2024

Order

Subject: Comprehensive guidelines for implementation of Pradhan Mantri Kisan Urja Suraksha Evam Utthaan Mahabhiyaan (PM-KUSUM) Scheme

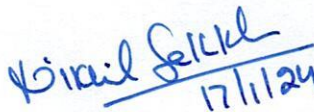
In supersession to this Ministry's Office Memorandum 32/645/2017-SPV Division dated 22.07.2019 regarding guidelines for implementation of Pradhan Mantri Kisan Urja Suraksha Evam Utthaan Mahabhiyaan (PM-KUSUM) Scheme and all the amendments so far under this scheme, it has been decided to issue a comprehensive guidelines for implementation of PM KUSUM Scheme, with following components:

- i. Component-A: Setting up of 10,000 MW of Decentralized Ground/ Stilt Mounted Grid Connected Solar or other Renewable Energy based Power Plants;
- ii. Component-B: Installation of 14 Lakh Stand-alone Solar Agriculture Pumps;
- iii. Component-C: Solarisation of 35 Lakh Grid Connected Agriculture Pumps including Feeder Level Solarization.

2. The comprehensive guidelines for implementation of PM KUSUM Scheme are enclosed.

3. This is issued with the approval of Competent Authority.

Enclosed: As above.


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To
All concern

Guidelines for Implementation of New Scheme for Farmers for Installation of Solar Pumps and Grid Connected Solar Power Plants

1. Background

- 1.1.** Government of India has taken various policy measures to increase the installed power generation capacity from non-fossil fuel sources by 2030. To provide energy and water security to farmers and enhance their income, de-dieselize the farm sector, and reduce environmental pollution, the Government of India launched PM-KUSUM on 08.03.2019.
- 1.2.** During 2020-21, the scheme was scaled-up and expanded from its pilot stage and notified with due approval of Ministry of Finance. In August 2022, the scheme was extended till March 2026.

2. Components of PM KUSUM

- 2.1.** The PM KUSUM Scheme has the following components:

- i. Component-A: Setting up of 10,000 MW of Decentralized Ground/ Stilt Mounted Grid Connected Solar or other Renewable Energy based Power Plants by the farmers on their land
- ii. Component-B: Installation of 14 Lakh Stand-alone Solar Agriculture Pumps
- iii. Component-C: Solarisation of 35 Lakh Grid Connected Agriculture Pumps including Feeder Level Solarization

- 2.2.** The PM-KUSUM Scheme allows inter-se transfer of quantities between Component-B and Component-C. All three components of the scheme aim to add Solar capacity of about 34,800 MW by March 2026 with the total Central Financial support of ₹ 34,422 crore.

3. Implementation mechanism

These consolidated guidelines subsume all the previously issued amendments from time to time.

4. Component A

4.1. Salient Features

- i. This Component aims at setting up of 10,000 MW of Decentralized Ground/ Stilt Mounted Grid Connected Solar or other Renewable Energy based Power Plants by farmers on their land.
- ii. Solar or other Renewable Energy based Power Plants (REPP) of capacity of 500 kW to 2 MW will be setup by Renewable Power Generator (RPG).
- iii. The REPP will be preferably installed within five km radius of the sub-stations in order to avoid high cost of sub-transmission lines and to reduce transmission losses.
- iv. The total energy purchased from these RE plants will be accounted for Renewable Purchase Obligation (RPO) under Decentralized Renewable Energy (DRE) category by the DISCOM.

4.2. Eligibility

- i. The REPP under the scheme would be installed by the farmers on his own land either directly by himself or in partnership with group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations (FPO)/Water User associations (WUA), or through a developer.
- ii. Group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations (FPO)/ Water User associations (WUA) etc. can opt for developing the REPP through developer(s). The farmer may provide his land to the DISCOM, which will then be considered as RPG in this case. In such a case, the land owner will get lease rent as mutually agreed between the parties. The lease rent may be in terms of Rs. per year per acre of land or in terms of Rs. per unit energy generated per acre of land area. The farmer(s) may opt for payment of lease rent directly in their bank account by the DISCOM, from the payment due to the developer. A model Land Lease Agreement to facilitate the beneficiaries is as per Annexure I. However, the terms of Land Lease Agreement may be finalised with mutual consent of concerned parties.

4.3. Notification of sub-station wise generation capacity and intent to setup REPP

- i. DISCOM shall assess and notify RE generation capacity that can be injected into 33/11 kV or 66/11 kV or 110/11 kV sub-station in rural areas and place such notification on its website for information of all stakeholders.
- ii. DISCOMs will notify sub-station wise surplus capacity which can be fed from such RE power plants to the Grid
- iii. DISCOMs should prefix the levelized tariff.
- iv. DISCOM shall invite applications from interested beneficiaries for setting up the renewable energy plants.
- v. The renewable power generated will be purchased by DISCOMs at the pre-fixed levelized tariff.
- vi. In case the aggregate capacity offered by Applicants is more than notified capacity for a particular sub-station, bidding route will be followed by DISCOMs to select Renewable Power generator and in such cases the pre-fixed levelized tariff will be the ceiling tariff for bidding.

- vii. For setting up of plant, land will be required. To facilitate farmers willing to lease out their land for development of RE plants near the notified substation(s), DISCOMs may make a list of such farmers and place that list on their website.
- viii. However, the leasing of land of any farmers will be a bi-partite agreement between the farmer and the developer, and the DISCOM will not be held responsible for failure in getting the land leased out to a developer.

4.4. Application procedure & Selection of REPP

- i. DISCOM may invite applications for Expression of Interest (EOI) from prospective RPGs, through their online portal.
- ii. The RPGs shall submit their application for setting up REPP to DISCOM/SIA, as per prescribed format.
- iii. The application should be submitted along with a non-refundable processing fee from the interested RPGs, which in no case shall be higher than Rs. 5000 per MW or part thereof of the capacity applied for.
- iv. In case the total aggregate capacity of eligible applications received for a particular sub-station is less than or equal to the capacity notified for connectivity at the sub-station, Letter of Award (LoA) will be awarded to all eligible applicants for procurement of renewable power at a pre-fixed levelized tariff on first come first serve basis within one month from the receipt of application
- v. In case the total aggregate capacity of eligible application received for a particular sub-station is more than the capacity notified for connectivity at the sub-station, then DISCOM or any agency authorized by the DISCOM shall invite Bids from all these applicants.
- vi. Selection of bidders will be based on the lowest tariff offered in the ascending order as quoted by the bidders in the closed bid or e-reverse auction. In such cases, the pre-fixed levelised tariff will be the ceiling tariff for bidders.
- vii. In case of bidding, all eligible applicants will have to submit tariff bids within a prescribed time. Selection of bidders will be based on the **lowest tariff** offered in the ascending order as quoted by the bidders in the **closed bid**. LoA will be awarded to all successful bidders.

4.5. Clearances required from the State Government and other local bodies

The RPG is required to obtain necessary clearances as required for setting up the REPP in coordination with DISCOMs. District Collectors should facilitate the clearances required for issues related to land permissions, right of way, etc.

4.6. Power Purchase Agreement (PPA)

- i. A model PPA (Power Purchase Agreement) to be executed between RPG and DISCOMs is as per Annexure II.
- ii. The duration of PPA will be 25 years from Commercial Operation Date (COD) of the project.
- iii. The PPA will have to be executed by RPG within two months from the date of issue of LoA by DISCOM or any agency authorized by the DISCOM.
- iv. The DISCOM will be obliged to buy the entire power from RPG within the contract capacity.

- v. The RPG will be free to operate the plant after expiry of the 25 years of PPA period if other conditions (like land lease, etc.) permits.
- vi. However, any extension of the PPA period beyond 25 years shall be through mutual agreement between the RPG and DISCOM.
- vii. As a payment security measure, DISCOM will have to maintain Escrow Arrangement as defined in the PPA.

4.7. Bank Guarantees (BG)

- i. In case of bidding, the RPG shall provide Earnest Money Deposit (EMD) of Rs. 1 Lakh/MW in the form of Bank Guarantee along with EoI.
- ii. The EMD of Rs. 1 Lakhs per MW will be converted into Performance Bank Guarantee (PBG) for the successful bidders, who have signed the PPA within stipulated time period.
- iii. In case the selected RPG fails to execute the PPA within the stipulated time period, the Bank Guarantee equivalent to EMD shall be encashed by DISCOM as penalty.
- iv. In case any bidder is not selected, DISCOM shall release the EMD within 15 days of the date of issue of LoA to selected RPG(s).
- v. The PBGs shall be valid for a period of 15 months from the date of issue of LoA for the REPP.
- vi. The PBG will be returned to the RPG immediately after successful commissioning of REPP, after considering any penalties due to delay in commissioning as per provisions stipulated in the Guidelines.

4.8. Connectivity

- i. The selected RPG will be responsible for laying of dedicated 11 or 33 kV, 66/11 kV or 110/11 kV, line from REPP to sub-station, construction of bay and related switchgear at sub-station where the plant is connected to the grid and metering is done.
- ii. RPG can get the transmission line constructed through DISCOM by paying the applicable cost and other charges. RPG will generally be responsible for maintaining this dedicated transmission line.
- iii. In case more than one bidder are awarded projects to be connected to same Sub-station, they shall be permitted to co-ordinate with each other for setting up common transmission line for feeding to Sub-Station if they so desire and with the approval of DISCOM. The RPG shall comply with grid connectivity and other regulations as applicable.

4.9. Release of Performance Based Incentive (PBI) to DISCOM

- i. DISCOM will be eligible to get Performance Based Incentive (PBI) @ Rs. 0.40 per unit purchased or Rs. 6.6 lakh per MW of capacity installed, whichever is less, for a period of five years from the COD.
- ii. To avail the PBI, DISCOM shall submit following documents after completion of one year from the COD and every year thereafter till five years:
 - (a) Timely payment of monthly lease rent, if applicable, to the land owner of the project.
 - (b) Monthly units purchased from the plant and corresponding payment made to the project developer.

- iii. Applicable PBI would be released to the DISCOM after submission of these documents by DISCOM to MNRE.
- iv. The DISCOMs can, if they desire so, pass on the PBI given to DISCOMs by the Central Government under this component, to the REPP owner to get more competitive tariff of RE Power.

4.10. Timeline and Penalty

- i. The selected RPG shall commission the solar power plant within 15 months from date of issuance of LoA.
- ii. The DISCOM is obliged to purchase power from the commissioned REPP even in case of early commissioning.
- iii. A duly constituted Committee of DISCOM officials will physically inspect the Plant in not more than 03 days from the date of receiving a call from the RPG and certify successful commissioning of the plant.
- iv. In case any RPG fails to achieve this milestone, DISCOM shall encash the Performance Bank Guarantee (PBG) in the following manner:
 - (a) Delay up to six months – The PBG on per day basis and proportionate to the balance capacity not commissioned.
 - (b) In case the commissioning of the solar power plant is delayed over six months, the PPA capacity shall stand reduced / amended to the Project capacity commissioned at the end of six month from scheduled Commissioning Date.
- v. In case of delays of plant commissioning due to the reasons beyond the control of the RPG, DISCOM after having satisfied with documentary evidences produced by the RPG for the purpose, can extend the time for commissioning date without any financial implications to the RPG.

4.11. Quality Control, Monitoring and Maintenance

- i. In order to ensure only quality systems are installed, prevailing MNRE/BIS specifications and quality control orders applicable for solar modules, inverters, Balance of System (BOS) and other equipment shall be followed. These shall be monitored by State Implementing Agency (SIA) periodically.
- ii. The SIA would be responsible for ensuring Quality Control, proper maintenance and monitoring of REPPs.
- iii. SIA may assign technical consultants to assist farmers with the preparation of DPR and financial models who could also provide capacity building and guidance on the best practices of system installation and O&M.

4.12. Roles and responsibilities of stakeholders

4.12.1. Ministry of New and Renewable Energy

- i. MNRE will provide Procurement Based Incentive (PBI) to the DISCOMs @ 40 paise/kWh or Rs.6.60 lakhs/MW/year, whichever is lower, for buying solar/ other renewable power under this scheme.
- ii. The PBI will be given to the DISCOMs for a period of five years from the Commercial Operation Date of the plant. Therefore, the maximum PBI that shall be payable to DISCOMs will be Rs. 33 Lakh per MW for the entire period.

4.12.2. DISCOMs

- i. The DISCOMs/SIAs shall aggregate the demand and send their proposal for sanction under the scheme along with details on their readiness to implement the Component A of the scheme, to MNRE.
- ii. Implementing Agencies will ensure transparency & objectivity in allocating capacity
- iii. The DISCOMs will ensure “must-run” status to the solar/ other renewable power plants installed under this scheme and will keep the feeders ‘ON’ during sunshine hours of a day.
- iv. DISCOM shall act as facilitator to the beneficiaries in implementation of this scheme.
- v. In case RPG has taken land from a farmer/group of farmers on lease for the project, the amount of monthly lease rent would be paid by the DISCOMs to the lessor directly in his/her bank account before 5th day of the month following the month for which the lease rent is due. In such a case, the lease rent paid by the DISCOM will be deducted from monthly payment due to the RPG.

4.12.3. State Implementing Agency (SIA)

- i. SIA will coordinate with State/UT, DISCOM and farmers for implementation of the scheme.
- ii. SIA will assist the farmers in project development activities including formulation of DPR, PPA/EPC contracts, getting funds from financial institutions, etc.
- iii. SIAs will provide the handholding support required by farmers/developers, like availing financing from banks, etc. It will also coordinate with District Authorities for ease of implementation.
- iv. A State level Committee under the chairmanship of Principal Secretary (Renewable Energy/Energy) will be setup by the participating SIA of that State. The committee will be responsible for settlement of any issues arising during selection of solar/ other renewable energy-based power plants and their implementation.
- v. SIA will be responsible for coordinating/organizing the quarterly meetings of the State Level Committee.
- vi. SIAs shall ensure publicity of the scheme and create awareness through advertisements etc, and monitor the implementation of the scheme.
- vii. The SIA will be eligible to get service charge of Rs. 0.25 Lakh per MW after commissioning of the projects.

4.12.4. Renewable Power Generator (RPG)

- i. RPG will be responsible for signing PPA and installing the plant as per provisions of scheme guidelines
- ii. RPG must adhere to applicable rules and regulations and make necessary compliances towards proper commissioning and operation of the plant during the PPA period.

5. Component B

5.1. Salient Features

- i. This Component is for installation of standalone Solar Pumps/replacement of diesel pumps by solar pumps.
- ii. Under this Component, individual farmers will be supported to install standalone Solar Agriculture pumps or replacement of existing diesel Agriculture pumps / irrigation systems in off-grid areas, where grid supply is not available.
- iii. Priority would be given to small and marginal farmers and farmers using micro irrigation.
- iv. Pumps of capacity higher than 7.5 HP may be allowed, but the CFA will be limited to the CFA applicable for pump of 7.5 HP.
- v. For the individual farmers in the North-Eastern region (NER); Hilly region (Jammu & Kashmir, Ladakh, Uttarakhand and Himachal Pradesh) and Islands (Andaman & Nicobar, Lakshadweep), the CFA will be available for pump capacity up to 15 HP, however the CFA for pumps up to 15 HP will be restricted to 10% of total installations
- vi. Maximum Solar PV capacity in kW is allowed as per the pump capacity in HP, in accordance with the MNRE specifications. For example, 3 HP pump capacity cannot have solar capacity of more than 3 kW.
- vii. DISCOMs/ Agricultural Department/ Minor Irrigation Department/ any other Department designated by State Government will be the implementing agencies for this component.
- viii. Agricultural Department may be prioritized as State Implementing Agency (SIA) by the State Governments given their extensive network of Agri and allied services along with embedded human resource availability.
- ix. Implementing agency will get service charges as applicable under Scheme Guidelines

5.2. Pre-Commissioning Activities

5.2.1. Demand Aggregation and Allocation of Solar Pumps

- i. The SIA will submit proposals to MNRE for approval.
- ii. The SIA after submitting proposal to MNRE may choose to start the preparatory activities including tendering process. However, the Letter of Award/Purchase Order shall be issued after the issuance of sanction letter by MNRE.
- iii. Based on the demand received from SIAs, MNRE will allocate quantity of pumps to the implementation agencies in the States after approval by a Screening Committee under the chairmanship of Secretary, MNRE.
- iv. MNRE will have the discretion to modify/cancel the allocated capacity based on the pace of progress in any particular state, or as per requirements of the scheme

5.2.2. Implementation

Component B can be implemented in two modes – with State share and without State share. The Central Government will provide financial assistance of 30% (or 50% for North Eastern Region/Hilly region/Islands) of the Benchmark Cost or the Tender Cost, whichever is lower, of the stand-alone solar Agriculture pump. The State Government will provide a subsidy of atleast 30%; and the remaining up to 40% is to be provided by bank loan/farmer.

In case the State Government is not in a position to give its share of subsidy of 30% but farmers are willing to set up solar water pumping system with the Central Financial Assistance only, the farmers are permitted to do so. Central share will continue to remain 30% (or 50% for NER/Hilly region/Islands), with the remaining 70% in General category states and 50% in Hilly region/NER/Islands being borne by the farmer. The Ministry will develop a National Portal to enable beneficiaries to apply for solar pump with central subsidy only.

5.2.3. Bidding Procedure

The States will call for tender for installation of solar water pumping system through the SIAs or any other agency nominated by the State Government. These agencies will carry out tendering process as per the guidelines, standards, & specifications laid down by MNRE. Any deviation shall normally be not permissible except in specific cases with the approval of Screening Committee in MNRE. The MNRE will list out the pumps/motors/panels and other equipments of high quality and specify that only those pumps/motor/panels which are in the approved list, can be used. The following categories, subject to meeting the technical and financial requirement of the tender, are allowed to participate in the tendering:

- (a) System Integrators/ Aggregators/ Any other entities fulfilling technical and financial criteria.
- (b) Any manufacturer of solar PV modules or manufacturer of solar pumps or manufacturer of solar pump controllers.
- (c) Joint venture of any of manufacturers mentioned at (b) above with system integrators/aggregators.

If the vendor fails to install the allocated pumps within the stipulated period, the said vendor shall be debarred for five years' period from the date of such decision of debarment. Extension may be granted for valid reasons. In all cases, the successful bidder shall provide AMC for five years from the date of installation, real time monitoring, helpline, district level service centers and comply with standards of performance in dealing with complaints/redressal mechanism. It will be mandatory to use indigenously manufactured solar modules with indigenous solar cells. Further, the motor-pump-set, controller and balance of system should also be manufactured indigenously. The vendor has to declare the list of imported components used in the manufacturing of solar water pumping system.

5.2.4. Provision of USPC

Since pumps are generally used for 150 days in a year, the installed solar capacity can be optimally utilized by using Universal Solar Pump Controller (USPC), through which farmers can use solar power for other activities like operating chaff cutter, floor mill, cold storage, drier, etc., and increase his income. Option would be given to the farmer to opt for USPC and separate bid price for solar water pumping system with USPC will be invited and subsidy will be made available for these pumps according to benchmark price of solar pumps without USPC, even if the price discovered for solar pumps without USPC are less

than benchmark price. States/UTs may bear this additional cost to facilitate use of solar energy for other activities and increasing the income of farmers.

5.2.5. Water Saving Techniques

New Solar Agriculture pumps would not be covered under this component in Dark zones/black zones. However, existing standalone diesel pumps, can be converted into standalone solar pumps in these areas provided they use micro irrigation techniques to save water. In order to minimize the water usage for irrigation purpose, preference will be given to the farmers using Micro irrigation systems or covered under Micro irrigation schemes or who opt for micro irrigation system. The size of pump would be selected on the basis of water table in the area, land covered and quantity of water required for irrigation.

For solar pumps to be set up and used by Water User Associations (WUA)/Farmer Producer Organizations (FPO)/Primary Agriculture Credit Societies (PACS) or for cluster-based irrigation system, the CFA will be allowed for solar pump capacity of higher than 7.5 HP considering up to 7.5 HP capacity for each individual in the group (for example when a group of 5 farmers in above mentioned category installs a pump of 40 HP capacity than the CFA up to 37.5 HP will be given to the group).

5.3. Post Commissioning Activities

5.3.1. Central Financial Assistance

MNRE will release the CFA towards the installation of solar pumps under the scheme as per the Benchmark cost or tender cost, whichever is lower. MNRE will be issuing the benchmark cost for various capacities and models being implemented under the scheme, from time to time.

5.3.1.1. Eligible CFA with State share

- i. CFA of 30% of the benchmark cost or tender cost, whichever is lower, of a particular category/type of the stand-alone solar Agriculture pump will be provided. The State Government will give a subsidy of at-least 30%; and the remaining 40% will be provided by the farmer.
- ii. However, in North Eastern States, Sikkim, Jammu & Kashmir, Himachal Pradesh and Uttarakhand, Lakshadweep and A&N Islands, CFA of 50% of the benchmark or tender cost whichever is lower, of a particular category/type of the stand-alone solar Agriculture pump will be provided. The State Government will give a subsidy of at-least 30%; and the remaining at most 20% will be provided by the farmer.

5.3.1.2. Eligible CFA without State share

- i. CFA of 30% of the benchmark cost or tender cost whichever is lower, of a particular category/type of the stand-alone solar Agriculture pump will be provided. The remaining 70% will be provided by the farmer either directly or through loan.
- ii. In North Eastern States, Sikkim, Jammu & Kashmir, Himachal Pradesh and Uttarakhand, Lakshadweep and A&N Islands, CFA of 50% of the benchmark cost or tender cost

whichever is lower, of a particular category/type of the stand-alone solar Agriculture pump will be provided. The remaining 50% will be provided by the farmer.

- iii. MNRE will also develop an online portal where farmer can directly register themselves and avail transfer of subsidy in their account after successful completion of installation. Subsidy in this case will be restricted to 30% of Benchmark Cost or Tender Cost, relevant to the State, whichever is lower.

5.3.2. Access to Financing

- i. Bank finance may be made available for farmer's contribution, so that farmer has to initially pay only 10% of the cost and the remaining amount (other than subsidy) can come from loan.
- ii. SIAs will make special efforts to organize events like *Bank Mela* at block and district levels and sensitize the banks to the need of farmers for accessibility of finance under the scheme.

5.3.3. Installation timeline and Penalties

Projects for installation of Solar Agriculture pumps systems shall be completed within 24 months from the date of sanction by MNRE. Extension in project completion timelines, up to a maximum period of three months, will be considered at the level of Group Head in MNRE and up to 6 months or beyond at the level of Screening Committee in MNRE on submission of valid reasons by the implementing agency.

5.3.4. Release of funds by MNRE

- i. Funds up to **30%** of the applicable CFA for the sanctioned quantity would be released **as advance** to the implementing agency after placement of letter of award(s) to the selected vendors.
- ii. **Second instalment up to 60%** of the applicable CFA would be released on submission of the provisional UCs of the first release and the details of partial installation of pumps.
- iii. The **last instalment** of balance eligible CFA **up to 10%** along with applicable service charges would be released on acceptance of the Project Completion Report in the prescribed format, Utilization Certificates as per GFR and other related documents by the Ministry.
- iv. The implementing agencies may pass on these funds to the selected vendors in different stages on achievement of various milestones as per terms and conditions of letter of award(s).
- v. 2% of the eligible CFA will be provided as service charges in totality to all the agencies involved in implementation including the designated SIA. Part of service charges (to be decided by MNRE) shall be given to the central agency for centralised tendering.
- vi. MNRE may release 50% of eligible service charges for the sanctioned quantity to State Implementation Agencies after placement of LoA for preparatory activities. Additionally, MNRE will retain 33% of eligible service charges for nation-wide Information, Education and Communication (IEC) activities.
- vii. The CFA in case of online portal, as per Para 5.2.2 (iv), will be released after installation of pump.

5.4. Monitoring and maintenance

- i. Selected vendors shall be responsible for design, supply, installation and commissioning of solar agriculture pumps. Vendors will mandatorily provide AMC for a period of 5 years from the date of commissioning of the systems including insurance coverage for the installed systems against natural calamities and theft.
- ii. AMC will include inspection by Vendor at least once in a quarter and submission of quarterly inspection report of the installed pumps as per prescribed format. To ensure timely maintenance of the systems the vendor shall have one authorized service centre in each operational district or cluster of districts as decided by the SNA depending upon number of installed pumps and a helpline in local language should be made available. The helpline number shall be indicated on the pump/ controller at suitable location easily visible to the user.
- iii. All solar agriculture pumps sanctioned under the Programme shall be provided with remote monitoring system by the vendor. It will be mandatory to submit performance data of solar power plant online to MNRE in the manner and format prescribed by MNRE.
- iv. Monitoring of the Scheme and its implementation will be carried out during the period of implementation of the Scheme as given below:
 - a) The implementing agency would be responsible for monitoring include timely installation and functioning of the pumps. The progress report of its installation will be submitted to the MNRE by the SIAs every month.
 - b) Funds may be released by implementing agency to the vendor on submission of bank guarantee as specified in the tender by that vendor for a period of five years. Alternatively, BG may be provided initially for a period of one year which may be extended on year to year basis thereafter.
 - c) The Ministry officials/ designated agency may inspect the ongoing installation or installed plants.
- v. In case the installed systems are not as per standard, non-functional on account of poor quality of installation, or non-compliance of AMC, the Ministry/State Government reserves the right to debar the bidder/vendor and any of its successors up to a period of five years from the date of such decision of debarment.

5.5. Responsibilities of Implementation Agency

The Implementing Agencies will be responsible for the following activities:

- (i) Carry out wide publicity of the scheme to increase awareness, identify potential beneficiaries, and coordinate with banks for easy access of finances.
- (ii) Ascertain the demand for solar pumps in the state, prepare beneficiary list and submit to MNRE for allocation of demand.
- (iii) Carry-out the state bids/tenders for installation and maintenance of solar pumps sanctioned by MNRE under Component-‘B’.
- (iv) Ensure project completion within the given timelines and compliance of MNRE guidelines, and standards.

- (v) Oversee installation of solar pumps, ensure timely O&M, and report periodical progress to MNRE (this will include but is not limited to online submission of monthly and quarterly progress reports).
- (vi) Inspection of installed systems and online submission of completion reports to MNRE.
- (vii) Submission of utilization certifications and audited statement of expenditure through EAT/PFMS module and disbursement of MNRE CFA.
- (viii) Maintenance of updated records and make them available for inspection at the call of MNRE.
- (ix) Maintain real time monitoring data of the installed systems through dedicated web-portal.
- (x) Ensure the effective working of the Remote Monitoring System of the installed pumps, and conduct periodical inspection of the same.
- (xi) Submission of accurate, verified, and complete records in all aspects to MNRE for ensuring the timely payment of CFA.
- (xii) Performance monitoring of installed system through third party.
- (xiii) Ensure compliance of AMC by the vendors.

6. Component C

6.1. Salient Features

- i. This Component aims at solarization of grid connected agriculture pumps including Feeder Level Solarization
- ii. The objective of this component is to provide reliable day-time solar power to farmers, enhancing their income by purchasing surplus solar power and thus incentivizing them for saving water
- iii. Under Individual Pump Solarization (IPS), solar PV capacity up to two times of pump capacity in kW is allowed, so that the farmer will be able to use the generated solar power to meet the irrigation needs and get additional income by selling surplus solar power to DISCOMs.
- iv. Under Feeder Level Solarization (FLS), States are supported for solarization of agricultural feeder or mixed feeders.
- v. DISCOMs /GENCO/ any other Department designated by State Government will be the implementing agencies
- vi. State Implementing agencies will submit proposals to MNRE for approval.
- vii. In case of dark zones/black zones only existing grid connected pumps will be solarized.
- viii. Implementing agency will get service charges as applicable under Scheme Guidelines.

6.2. Demand Aggregation and allocation of quantities

- i. State Implementing agencies will submit proposals to MNRE for approval.
- ii. Based on demand received from SIAs, MNRE will allocate quantity of pumps to the implementation agencies in the States after approval by a Screening Committee under the chairmanship of Secretary, MNRE.
- iii. The SIA after submitting proposal to MNRE may choose to start the preparatory activities including tendering process. However, the Letter of Award/Purchase Order shall be issued after the issuance of sanction letter by MNRE.
- iv. MNRE will have the discretion to modify/cancel the allocated capacity based on the pace of progress in any particular state, or as per requirements of the scheme

6.3. Individual Pump Solarization (IPS)

6.3.1. Options for solarisation under Component C (IPS)

Followings are the two options through which grid connected pumps can be solarized; State may choose any other option, as well.

- i. **Pump to run on both Solar and Grid:** In this case the agriculture pump will continue to run at rated capacity taking power from solar panels and balance power from grid, if required, and in case solar power generation is higher than required by pump, the additional solar power would be fed to the grid. Net metering may be provided in this case.
 - a) Farmer would be able to import and export power to the grid at the rate specified by the SERC.

- b) DISCOM may introduce different drawal and injection tariff rates so that farmers are discouraged to draw power from the grid during the peak hours. Further, Time of Day (ToD) tariff is also an alternative to efficiently manage demand and supply on the solarised feeders.
- ii. **Pump to run on solar power only:** In this case the pump will only run on the solar power as in case of stand-alone solar pump and no power will be drawn from the grid for operation of pump.
 - a) The motor pump set will have to be replaced with AC/DC solar water pumping system as per MNRE specification for standalone solar pump and when the pump is not running the solar power can be fed into the grid through suitable grid-tied inverter.
 - b) The total solar PV capacity including capacity additionally allowed under the Scheme can be bifurcated into two portions, one portion of SPV capacity as per MNRE specifications required for the solar pumps of given HP, which will either run the pump or feed power to the grid when the pump is not running; and other portion of SPV capacity out of the total allowed by the State will continuously feed power to the grid during sunshine hours.

6.3.2. Selection of Feeders and load survey

- i. Feeder-wise implementation is to be carried out under this component for solarisation of grid-connected agricultural pumps.
- ii. Feeders may be selected on the basis of load, technical and commercial losses, number of consumers, etc. Efforts should be made to solarise all agriculture pumps in a feeder, however, SIAs may impose a minimum solarisation requirement for a feeder in terms of minimum % of pumps solarized on that feeder.
- iii. GPS Survey should be carried out on eligible feeders to correct feeder coding and ensure accurate feeder loads and distribution loss calculations.
- iv. Farmers may be given option to declare his actual connected load or alternatively the SIAs may carry out survey to get details on actually connected load so that solar PV panels of required capacity is provided to the participating farmers.
- v. SIAs may also assess the actual requirement of pump capacity based on water requirement and water table

6.3.3. System Specifications

- i. MNRE will provide updated specifications (as amended from time to time) for solar water pumping system, solar modules, MMS and other balance of system.
- ii. The vendors shall provide only such pumps/panels and other equipments which are BIS certified. MNRE may also draw a list of high quality solar pumps/panels and in such a case, vendors will supply only such models which are in the approved list.

- iii. It will be mandatory to use indigenously manufactured solar panels with indigenous solar cells and modules. Further, inverter/controllers and balance of system should also be manufactured indigenously. The vendor has to declare the list of imported components used manufacturing of equipment used in the solarisation system.

6.3.4. Bidding Procedure

- i. There will be State tendering for solar water pumping system through the SIAs or any other agency nominated by the State Government. These agencies will carry out tendering process as per the guidelines, standards, & specifications issued by MNRE from time to time. Any deviation shall normally be not permissible except in specific cases with the approval of Screening Committee, MNRE.
- ii. The vendors shall use only BIS certified equipment and systems. MNRE may also draw a list of certified models and manufacturers and in that case the equipment will be from that list.
- iii. The following categories subject to meeting the technical and financial requirement of the tender are allowed to participate in the tendering:
 - (a) System Integrators/ Aggregators/ Any other entities fulfilling technical and financial criteria
 - (b) Any manufacturer of solar PV modules or manufacturer of solar pumps or manufacturer of solar pump controllers using indigenous technology.
 - (c) Joint venture of any of manufacturers mentioned at (b) above with system integrators/aggregators.
- iv. Selected vendors shall be responsible for design, supply, installation and commissioning of solar agriculture pumps.
- v. If the vendor upon empanelment fails to install the allocated pumps within the stipulated period, the said vendor shall be debarred for five years' period from the date of such decision of debarment.
- vi. It will be mandatory to use indigenously manufactured solar panels with indigenous solar cells and modules. Further, the motor-pump-set, controller and balance of system should also be manufactured indigenously. The vendor has to declare the list of imported components used in the manufacturing of solar water pumping system.
- vii. Thorough maintenance of selected agriculture feeders is required to maintain feeder availability during sunshine hours. This includes maintenance of 33/11 kV sub-station, 33 kV, 11 kV and LT lines and distribution transformers, etc., on regular basis in a time bound manner. Proper protection system including improved earthing of equipment shall be provided considering possibility of high voltage/current due to multiple generating sources in the feeder selected for solarisation.

6.3.5. Eligible CFA under Component C (IPS)

- i. The CFA will be limited to Solar PV capacity up to two times of pump capacity in kW for pumps up to 7.5 HP. Solarisation of Pumps of capacity higher than 7.5 HP is also allowed, however, the CFA in such cases would be limited to the CFA applicable for pump of 7.5 HP in the respective State/UTs.

- ii. The solar pumps installed by the individual farmers in the North-Eastern States; UTs of Jammu & Kashmir and Ladakh; and the state of Uttarakhand and Himachal Pradesh the CFA will be available for pump capacity up to 15 HP, however the CFA for pumps up to 15 HP will be restricted to 10% of total installations
- iii. CFA up to 30% (upto 50% of NER/Hilly/Islands) of the cost of solarisation will be provided for solar PV component including solar modules, module mounting structure, controller/inverter, balance of system, installation & commissioning, five Year CMC, insurance, etc., on basis of benchmark cost or cost discovered through tender whichever is less. The States are free to provide additional CFA to reduce the beneficiary farmer contribution.
- iv. There is no CFA for replacement of existing less efficient grid connected agricultural pump with energy efficient agricultural pump, however, the states are free to provide additional financial support for replacement of existing pumps with energy efficient pumps.
- v. It is also permitted to implement Component C(IPS) without state subsidy. If any State Government does not provide for subsidy by the State, the farmer may choose and implement the solarization with only Central Government subsidy and his contribution and loan from the banks. The banks may provide loans of up to 70% of the cost. From such sale of excess power from the Solar PV project, the additional income should be paid to the bank towards repayment of loan in addition to the regular installment by the farmer.
- vi. All the modalities and conditions for the release of CFA under Component C (IPS) will remain same as Component B, as provided in Para 5.5.

6.3.6. Monitoring and maintenance

- i. Vendors will mandatorily provide AMC for a period of 5 years from the date of commissioning of the systems including insurance coverage for the installed systems against natural calamities and theft.
- ii. AMC will include inspection by Vendor at least once in a quarter and submission of quarterly inspection report of the installed pumps as per prescribed format. To ensure timely maintenance of the systems the vendor shall have one authorized service centre in each operational district or cluster of districts as decided by the SNA depending upon number of installed pumps and a helpline in local language should be made available. The helpline number shall be indicated on the pump/ controller at suitable location easily visible to the user.
- iii. All solar Agriculture pumps sanctioned under the Programme shall be provided with remote monitoring system by the vendor. It will be mandatory to submit performance data of solar power plant online to MNRE in the manner and format prescribed by MNRE. The remote monitoring system may consist of smart meters, communication hardware/ IoT devices, software interface, web and mobile application and internet connection.
- iv. Monitoring of the Scheme and its implementation will be carried out during the period of implementation of the Scheme as is given below:

- a) The implementing agency would be responsible for monitoring the installation of the solar pumps and their functioning.
 - b) Implementing agencies will submit monthly progress report for the sanctioned projects.
 - c) Funds may be released by implementing agency to the vendor on submission of bank guarantee as specified in the tender by that vendor for a period of five years. Alternatively, BG may be provided initially for a period of one year which may be extended on year to year basis thereafter.
 - d) The Ministry officials or designated agency may inspect the ongoing installation or installed plants.
- v. In case the installed systems are not as per standard, non-functional on account of poor quality of installation, or non-compliance of AMC, the Ministry and the State Government reserves the right to debar the bidder/vendor and any of its successors up to a period of five years from the date of such decision of debarment.
 - vi. Possibilities would be explored by States for convergence of present scheme with schemes on promotion of micro irrigation system and replacement of agriculture pumps with energy efficient pumps and they may work out the modalities.

6.4. Implementation of Feeder Level Solarization

For the implementation of Feeder Level Solarization (FLS), the DISCOMs need to evaluate the agricultural load, segregate the feeder and solarize it. The States may also choose to offer virtual segregation using feeder level (Internet of Things) IoT. However, segregation would not be precondition for the solarization of mixed feeders. This component will be applicable to farmers already connected to grid. The feeder will be solarised, however, States may impose a minimum requirement of pumps on a feeder. The detailed framework for feeder level solarization will be as follows:

6.4.1. Execution Methodology

- i. The SNA /DISCOM/ SIA, will be the implementing agency for feeder level solarisation in their respective areas.
- ii. State Government may choose to appoint any other expert agency to help these implementing agencies for tendering and other related activities of installation of solar power plant for feeder level solarisation.
- iii. Where agriculture feeders have already been separated, those feeders may be solarised under the scheme.
- iv. Where the agriculture feeders are not separated, feeders having major load for agriculture may also be considered for solarisation under the Scheme. The requirement of total annual power for an agriculture feeder will be assessed and a solar power plant of capacity that can cater to the requirement of annual power for that feeder can be installed through CAPEX/RESCO mode, which will supply solar power to that feeder.
- v. Feeder level solar power plant may be installed to cater to the requirement of power for a single feeder or for multiple agriculture feeders emanating from a distribution sub-station (DSS) to feed power at 11 kV or at the higher voltage level side of the DSS. There

is no cap of the capacity of solar power plant for feeder level solarisation. The DISCOMs may identify land near DSS, get ownership of land or its lease rights, provide connectivity at DSS and lay sub-transmission line between DSS and solar power plant.

- vi. There could be situations where for distribution substation, the solar power plant can be installed either under Component A or under FLS of Component C. In such situations, DISCOMs while bidding for installation of solar power plants under FLS of Component C, the qualification requirement may be kept at par with the guidelines of Component A. This will allow all the eligible participants under Component A to also participate under Component C (FLS).

6.4.2. Simplified step by step procedure

- i. **Identifying the substation:** State Nodal Agencies/Implementing Agencies/DISCOM will identify substations having downstream agriculture load along with the number of pumps connected to that substation. The annual power requirement for the agriculture feeders and the capacity of solar power plant that can cater to the power requirement for that agriculture feeder may be assessed. Preference may be given to the substations with 11/33 kV bus bars. The identification will include an assessment of the agriculture load served downstream.
- ii. **Land for setting up the solar plant:** If there is no Government land near the substation to set up solar plant, the land may be taken on lease from the farmers. Land lease rates would be announced by the state government. Currently, some State offer lease rates which range from Rs 25,000 to Rs 50,000 per acre per year or 6% of ready reckoner rate, whichever is higher, with a yearly 3% increment of the base rate, and Rs 1/hectare/year for public land for a period of 30 years. The States may decide similar competitive provisions. The State Government will publicise these rates along with the list of substations and request farmers to offer their land on lease in the vicinity of the substations at the offered lease rent.
- iii. **Development of Online portal:** A dedicated online portal can be developed by the States/SIA/DISCOM which will serve as centralized portal for land aggregation. The state should have the details of identified substations. The portal may be developed by State/SIA/DISCOM. The States/SIA/DISCOMs will advertise their intention to take land on lease from the farmers in the vicinity of the identified substation along with a declaration of land lease rates. The farmers who wish to offer their land near the substation on lease may apply directly on the portal. They may also apply to the Tehsildar/District Magistrates. It would be the responsibility of the District Collector/District Magistrates to ensure that the offline applications received at their end from the farmers to lease their land for the installation of solar power plants, are shared with DISCOM/SIAs. The DISCOM/SIA would update the same on online portal on regular basis.

iv. Modalities for leasing

- a) **Public Land:** The State may facilitate by providing unutilized land on lease at a pre-decided annual rent. The State may also include their unutilized water bodies for the development of the projects.
- b) **Private Land:** All the private land owners who are interested in providing their land for projects may be encouraged to offer their land through the above-mentioned portal. The revenue authority should also verify the authenticity of the land through the respective District Collectors/Magistrates. In order to protect the interest of land owner, the State may decide the amount of lease rent for the land along with annual escalation provisions.

Considering the land required for 1 MW is around 4-5 acres, contiguous land of a minimum of 5 acres and nearer to the substation would be given the preference.

- v. **Provision of SPV:** The DISCOMs may form an SPV which can implement the project along with arrangements for leasing the land etc.
- vi. **Lessee and Lessor Agreement:** The Nodal Agency/DISCOM/SPV may also become the single entity to sign land lease agreements with all landowners. In such cases, the individual land owner need not interact with SPD and face uncertainty in timely lease payment. The nodal agency should sign an agreement with individual land owner and a tripartite agreement between DISCOM, Nodal Agency and Solar Power Developers may be worked out where payments are transferred to nodal agency for the purpose of lease rent. Nodal agency will inform the District Collector/District Magistrate from time to time, about the requirement of land and get in touch with the farmers to lease their land for the purpose.
- vii. **Selection of Solar Power Developers (SPD):** Since the scale of an individual solar project with substation is relatively small, therefore in order to get the benefit of economy of scale, multiple substations may be grouped as one bidding group. The SPD may be permitted to quote the tariff common for all projects under one group and SPD may sign a single PPA with DISCOM.
- viii. For the project under this mechanism, the States are free to choose Renewable Energy Implementing Agencies of Government of India to act as an intermediary procurer.

6.4.3. Estimation of Plant Capacity and eligible CFA under FLS

- i. For the purpose of calculating Solar Plant Capacity and eligible CFA, the following approach would be taken:
 - 1) The existing load of the feeder will be assessed and a solar power plant of capacity that can cater to the requirement of annual power for that agriculture feeder can be installed either through CAPEX mode or RESCO mode, which will supply solar

power to that feeder. For example, a feeder having annual power requirement of say 10 lakh units, the power can be supplied by solar power plant of capacity around 600 kW with an annual CUF of 19%.

- 2) Average of consumption of last three years shall be considered for calculating the solar plant capacity as per calculations in Para 1) above
 - 3) Mixed feeders can also be solarized, however, MNRE CFA will be available based on capacity required for agriculture consumption.
 - 4) Solarisation of pumps of any capacity is allowed, however, in case of pumps of capacity above 7.5 HP, the CFA will be limited to solar capacity for 7.5 HP pumps.
 - 5) The solar pumps installed for feeder solarization in the North-Eastern States; UTs of Jammu & Kashmir and Ladakh; and the state of Uttarakhand and Himachal Pradesh the CFA will be available for pump capacity up to 15 HP, however the CFA for pumps up to 15 HP will be restricted to 10% of total installations
 - 6) For calculating consumption for pumps of capacity higher than 7.5 HP or 15 HP, as the case may be, average consumption of 7.5 HP/15 HP pumps on the same feeder may be considered. This average consumption may be used in estimating consumption for all pumps of capacity higher than 7.5 HP/15 HP.
 - 7) The state may choose to install feeder level solar power plant of capacity higher than capacity required for supplying power to agriculture feeder. However, in this case CFA will be limited for solar capacity required for supplying power to the agriculture feeder.
 - 8) Since the projects are to be commissioned near the point of consumption, distribution losses would be reduced, therefore, losses shall not be considered in plant capacity estimation.
 - 9) CUF shall be taken as per the solar insolation on site, however, annual CUF of minimum 19% shall be considered for calculation of plant capacity eligible for CFA. No restrictions to be made on installing DC capacity higher than total contracted AC capacity of the plant to help achieve higher CUF.
 - 10) In case of unmetered connections, following methods may be followed for calculation of consumption:
 - a. Indexation approved by the State Electricity Regulatory Commission may be followed.
 - b. If both metered and unmetered connections are there on the same feeder, capacity-wise average of consumption of the metered connections may be extended to the unmetered connections. This shall be cross-checked with the feeder level meter.
 - c. Consumption on feeder level meters may be used for estimation of plant capacity. However, if pumps of capacity higher than 7.5 HP/15 HP are there on such feeder, capacity may be calculated based on consumption reduced in proportion of the load if capacity is capped at 7.5 HP/15 HP and actual load on the feeder.
- ii. The cost of installation of solar power plant for the purpose of CFA, will be notified by MNRE from time to time. The eligible CFA would be 30% of the cost of installation of the solar power plant of capacity needed to meet the average consumption of the pumps connected on the feeder(s), as per calculations in Para (i) above.

6.4.4. Implementation under CAPEX mode and eligible CFA

- i. FLS can be implemented in CAPEX mode. The process of tendering and signing of work agreement with EPC contractor should normally be completed by SIA within six months from the date of issuance of sanction by MNRE.
- ii. For installation of feeder level solar power plant CFA of 30% (50% in case of NE States, hilly states/UTs and Island UTs) will be provided by central Government and balance will be met through loan from NABARD/PFC/REC.
- iii. Concessional financing will be available for solarisation of agriculture pumps as RBI has already included this component under priority sector lending and MoAFW has included community level solarisation under Agriculture Infrastructure Fund.
- iv. The current outlay on subsidy being presently provided for supply of electricity to agriculture pumps by State Government can be used to repay the loan in five to six years after which power will be available free of cost and outflow from State Government's exchequer on account of electricity subsidy for agriculture will come to an end.
- v. On an average power for agriculture will be required only for 150 days in a year, the electricity produced from the solar power plant in the remaining days will possibly provide an additional income to the DISCOM. If this is also used to pay off the loans taken from NABARD/PFC/REC, the loan can be repaid sooner.
- vi. The DISCOM may carry-out operation and maintenance of the solar power plant. Alternatively, the EPC contractor who install the solar power plant may also be given task for O&M of plant and supply guaranteed solar power for 25 years.
- vii. Payment for O&M of solar plant can be linked with energy production. An undertaking to this effect will be submitted by DISCOM to MNRE.

6.4.5. Implementation under RESCO mode and eligible CFA

- i. For selection of RESCO developer and PPA, the Guidelines and Model PPA issued by MNRE for implementation of Component-A of PM-KUSUM Scheme may be used, with suitable modifications.
- ii. The maximum timeline allowed for commissioning of solar power plant by RESCO Developer will be 12 months from date of issuance of LoA. However, the implementing agency may increase this time on case to case basis, up to the sanctioned timeline given by MNRE.
- iii. The process of selection of RESCO Developer and signing of PPA should normally be completed by implementing agency within six months from the date of issuance of sanction by MNRE.
- iv. A suitable clause on PPA shall be included to ensure that RESCO developer does not sell solar power to any other buyer except the concerned DISCOM during tenure of PPA, including penal provision calling for refund of proportionate CFA granted to the project by MNRE on violation of this condition.
- v. For installation of feeder level solar power plants through RESCO model, the developers will be selected on the basis of lowest tariff offered for supply of required solar power for a period of 25 years after taking into account the subsidy being given by Govt. of India.

- vi. In case of any liquidation of assets of the solar power plant prior to completion of PPA period, the first charge shall be towards recovery of proportionate CFA granted to the project by MNRE.
- vii. The developer will get CFA @ 30% of the estimated cost of installation of solar power plant.
- viii. The solar power supplied by RESCO developer would much cheaper than present cost of power delivered at distribution sub-station and therefore, DISCOM will save the amount equal to difference between the two.
- ix. In the RESCO model the burden of electricity subsidy for agriculture will be reduced to the extent of difference mentioned above and not become zero as in case of CAPEX model, where once the loan is repaid, subsidy support from state Government is no longer required.
- x. States may choose to provide upfront subsidy in lieu of electricity subsidy being given to agriculture consumers. This upfront subsidy from state could be in the form of VGF to RESCO developer, in addition to CFA, to supply power to farmers of an agriculture feeder at present subsidised rates or any other rate fixed by state Government.

6.4.6. System specifications and Quality Control

- i. All components used for installation of solar power plants shall confirm to applicable BIS/MNRE specifications and follow quality control guidelines issued by MNRE. It will be mandatory to use indigenously manufactured solar panels with indigenous solar cells.
- ii. Further, the balance of system should also be manufactured indigenously. The vendor must declare the list of imported components used in the solarisation system.
- iii. MNRE will draw up a list of approved models and manufacturers after carrying the quality checks. When such a list is prepared only that equipment shall be allowed which is within the approved list.
- iv. To ensure the quality, inspection shall be carried out of the solar modules, inverter/controller, MMS, etc., during the installation of system and final commissioning of the system. Officers involved in inspection should be domain experts, properly trained and equipped with necessary tools for inspection. The SIA may engage a third-party inspection agency for this purpose.
- v. Thorough maintenance of selected agriculture feeders is required to maintain feeder availability during sunshine hours. This includes maintenance of DSS, sub-transmission/LT lines and distribution transformers, etc., on regular basis in a time bound manner.

6.4.7. Monitoring and maintenance

- i. Selected vendors shall be responsible for all aspects of solarisation viz., design, supply, installation, and commissioning.
- ii. Vendors will mandatorily provide AMC for a period of 5 years from the date of commissioning of the systems including insurance coverage for the installed systems against natural calamities and theft.

- iii. AMC will include submission of quarterly inspection report of the installation as per prescribed format. To ensure timely maintenance of the systems the vendor shall have one authorized service center in each operational district and a helpline in local language in each operational State.
- iv. State may choose to install watchdog transformer and devices to regulate power supply and monitor non-participating connections on the feeder concerned.
- v. MNRE has developed a central monitoring portal which will extract data from the State portals for monitoring of the scheme and analyze data generated, which is in turn be used in scheme refinement and taking measures to attract more farmers to the scheme and induce required behavioral changes.
- vi. It will be mandatory for DISCOMs to monitor solar power generation and performance of the solar power plant through online system. The online data will be integrated with central monitoring portal which will extract data from the State portals for monitoring of the scheme.
- vii. SIA may specify a minimum guaranteed generation during a year from the solar system installed for a specified period and provision of compensation in case of not achieving the same.
- viii. Monitoring of the Scheme and its implementation will be carried out during the period of implementation of the Scheme as given below:
 - a) The implementing agency would be responsible for monitoring parameters such as end-use verification and compilation of statistical information.
 - b) Implementing agencies will submit monthly progress report for the sanctioned projects.
 - c) Funds may be released by implementing agency to the vendor on submission of bank guarantee as specified in the tender by that vendor for a period of five years. Alternatively, BG may be provided initially for a period of one year which may be extended on year to year basis thereafter, up to 5 years.
- ix. The Ministry officials or designated agency may inspect the ongoing installation or installed plants. In case the installed systems are not as per standard, non-functional on account of poor quality of installation, or non-compliance of AMC, the Ministry reserves the right to debar the bidder/vendor and any of its successors up to a period of five years from the date of such decision of debarment.
- x. In case the system is installed by the RESCO operator does not work for 25 years, the entire plant will be seized and auctioned by the DISCOM/SIA to recover the CFA.

6.4.8. Release of funds for Component C (FLS)

- i. The CFA up to 30% (upto 50% of NER/Hilly/Islands) of the cost of solarisation will be provided for the projects installed under Component C (FLS).
- ii. In case of installation under CAPEX mode, the SIAs are eligible for advance upto 40% of eligible CFA after completion of tendering process and signing of work agreement with EPC contractor selected for installation of solar power plant. The balance up to 60% eligible CFA would be released at the end of commissioning of plant where plant starts supplying power to agriculture feeder(s) and on submission of PCR and other related documents, as prescribed by MNRE.

- iii. Under the RESCO mode, CFA upto 100% of the total eligible CFA will be released to the RESCO developer through DISCOM on successful operation and performance of the solar plant for two months after the commissioning, with at least one month CUF as per minimum CUF agreed in PPA. The SIA need to submit PCR and other related documents, as prescribed by MNRE.
- iv. 2% of the eligible CFA will be provided as service charges in totality to all the agencies involved in implementation including the designated SIA. Part of service charges (to be decided by MNRE) shall be given to the central agency for centralised tendering.
- v. The MNRE will retain 33% of eligible service charges for national wide IEC activities. MNRE may release 50% of eligible service charges for the sanctioned quantities to SIAs after implementation of LOAs for preparatory activities.

6.5. Installation timeline and Penalties under Component C (IPS & FLS)

- i. Projects for installation of solar agriculture pumps and feeder level solarization under Component C shall be completed within 24 months from the date of sanction by MNRE.
- ii. Extension in project completion timelines on valid grounds, up to a maximum period of six months, will be considered at the level of Joint Secretary in MNRE. Extension beyond six months can be given by Secretary, MNRE for valid reasons.

6.6. Water saving and enhancing farmers' income

- i. Component C will enable farmers to access daytime reliable solar power for irrigation. Therefore, farmers can be incentivized for saving water and enhancing their income.
- ii. The DISCOMs shall assess the average power requirement by farmers of an area depending upon various factors. This power requirement will be treated as their benchmark consumption. The DISCOMs shall incentivize farmers for consuming power less than benchmark consumption.
- iii. Such saving of power shall be treated as surplus power injected by farmers and they will be paid by DISCOMs against this saved power at pre-determined tariff. The DISCOM will inform the farmers about the benchmark consumption and amount incentive per unit which they can avail of, in case of lower consumption. This will be an important measure for conserving groundwater level.
- iv. Some of the states have indicated that for a feeder being solarised not all farmers may be willing to install meters necessary for availing the said incentives under the scheme. Therefore, it will be the farmers choice to opt or not for this facility.
- v. In order to minimize the water usage for irrigation purpose, preference will be given to the farmers using Micro irrigation systems or covered under Micro irrigation schemes or who opt for Micro irrigation systems.

6.7. Responsibilities of Implementation Agency

The Implementing Agencies will be responsible for the following activities:

- i. Carry out publicity of the scheme, in consultation with MNRE to increase awareness amongst potential beneficiaries.
- ii. Coordinate with Banks/FIs to provide the loan facilities for the required farmer share.
- iii. Prepare proposals and submit to MNRE for sanction
- iv. Conduct tendering process as per MNRE guidelines
- v. Issue additional instructions/ conditions such as minimum solarisation level of feeder for IPS.
- vi. Issue connectivity standards/regulations, if required, and facilitate connection to the grid for FLS.
- vii. Selection of feeder for solarisation and demand aggregation for solarisation of pumps under FLS.
- viii. Encourage Feeder wise committee of farmers to coordinate amongst the participating members and other agencies involved in implementation of the Scheme.
- ix. Selection of beneficiaries and implementation of scheme
- x. Oversee installation of systems.
- xi. Inspection of installed systems and online submission of completion reports to MNRE.
- xii. Disbursement of MNRE CFA and submission of utilization certificates and audited statement of expenditure through EAT/PFMS module.
- xiii. Online submission of monthly and quarterly progress reports.
- xiv. Ensure project completion within the given timelines and compliance of MNRE Guidelines and Standards.
- xv. Online and offline maintenance for records.
- xvi. Real time monitoring through dedicated web-portal
- xvii. Performance monitoring of installed system through third party
- xviii. Ensure compliance of AMC and training of locals by the vendors.
- xix. Any other activity to ensure successful implementation of the programme.

7. Installation of Innovative Standalone Solar Pumps

The scheme permits installation of innovative stand-alone solar pumps (under Component B and C) in test mode. The guidelines for installation of innovative stand-alone solar pumps are placed at Annexure III. These guidelines are applicable for all Indian innovators/ manufacturers/ service providers, who wish to install innovative stand-alone solar pumps in the country under this scheme.

8. Interpretation of the Guidelines

In case of any ambiguity in interpretation of any of the provisions of these guidelines, the decision of the Ministry of New & Renewable Energy shall be final.

The Guidelines may be reviewed by the Ministry from time to time and necessary modifications made with approval of Minister, New & Renewable Energy.

Glossary and Definitions

i. Ministry (Ministry of New & Renewable Energy)

Nodal Ministry of the Government of India for all matters relating to new and renewable energy to deploy new and renewable energy to supplement the energy requirements of the country and is referred to as Ministry in these guidelines.

ii. Renewable Power Generator (RPG)

Solar or other Renewable Energy based Power Plants (REPP) of capacity up to 2 MW will be setup by individual farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organizations (FPO)/Water User associations (WUA) hereinafter called Renewable Power Generator (RPG).

iii. Renewable Energy based Power Plant (REPP)

Renewable Energy based Power Plants to be commissioned under PM KUSUM

iv. Renewable Power Obligation

Under Section 86(1) (e) of the Electricity Act 2003 ("EA 2003") and the National Tariff Policy 2006, Renewable purchase obligation (RPO), is a mechanism by which the obligated entities are obliged to purchase certain percentage of electricity from Renewable Energy sources, as a percentage of the total consumption of electricity.

v. Commercial Operation Date

The Commercial Operation Date (COD) shall be considered as the actual date of commissioning of the solar power plant as declared by the Commissioning Committee.

vi. Expression of Interest

DISCOM may also invite applications for Expression of Interest (EOI) from prospective RPGs to identify the interested beneficiaries.

vii. Power Purchase Agreement

A electricity purchase agreement signed by the DISCOM with the qualified RPG for purchasing the electricity for a period of 25 years at the pre-determined/transparently determined Tariff.

viii. Letter of Award

Letter of Award (LoA) will be awarded to all eligible applicants for procurement of renewable power at a pre-fixed levelized tariff on first come first serve basis.

ix. Earnest Money Deposit (EMD)

In case of bidding, the RPG shall provide Earnest Money Deposit (EMD) in the form of Bank Guarantee along with EoI.

x. Performance Bank Guarantee (PBG)

The EMD will be converted into PBG for the successful bidders, who has signed the PPA within stipulated time period.

xi. Universal Solar Pump Controller

Universal Solar Pump Controller (USPC) is an electronic device through which farmer can use solar power for other activities like operating chaff cutter, floor mill, cold storage, drier, etc., and increase his income.

MODEL LEASE AGREEMENT

This **AGREEMENT OF LEASE** entered into on this _____ day of _____ at _____.

BETWEEN:

(hereinafter referred to as the "**LESSOR/OWNER**", which expression shall, wherever the context so requires or admits, SHALL mean and include his legal heirs, executors, administrators and assignees);

AND:

_____ (Name of Renewable Power Generator (RPG))

Represented by _____

(hereinafter referred to as the "**LESSEE**", which expression shall, wherever the context so requires or admits, SHALL mean and include its executors, administrators and assignees successors in interest).

I. WHEREAS the Lessor is the owner in possession of the Barren/ Agricultural land measuring _____ Acre _____ Kanal _____ marla _____ Share out of Hadbast No. _____ Khewat No. _____ Khatoni No. _____ Khasra No. _____ Mustil No. _____ Kila No. _____ situated at Village/City _____ Tehsil _____ District which is morefully described in the Schedule hereunder and hereinafter referred to as the Schedule property.

(Note: The legal revenue terms to be changes to those prevalent in the State)

II. WHEREAS the _____ (Name of RPG) being a _____ (Details of RPG) with an object to plan, develop and operate Renewable Energy based Power Plant (REPP) under MNRE Scheme notified on 8th March 2019.

(a) **WHEREAS** pursuant to the request of the Lessee, the Lessor has agreed to grant the lease, the Lessee has agreed to take on lease from the Lessor the land which is morefully described in Schedule written hereunder and hereinafter referred to as "**THE SCHEDULE PROPERTY**" for setting up of the " _____ Power Plant".

(b) That pursuant to the request of the Lessee, the Lessor has submitted an application under Section _____ for the conversion of the land and on behalf of the Lessor/owner the _____ (Name of RPG) shall presume that the land is deemed to have been converted for non-agricultural purposes. (Clause to be modified as per State Policy for use of Agriculture land for generation of renewable power)

III. NOW THIS AGREEMENT OF LEASE WITNESSES THAT in consideration of the above and of the mutual covenants of the Parties hereto, the Lessor hereby grants and the Lessee hereby accepts the lease of the Schedule property on the following terms and conditions:

1. PURPOSE OF LEASE:

The grant of lease by the Lessor to the lessee in respect of the Schedule property is for the purpose of developing a _____ Power Plant under MNRE Scheme notified on 8th March 2019.

2. PERIOD OF THE LEASE

The period of this Lease shall be for Twenty-seven (27) years from this day which may be renewed at the option of the Lessee and Lessor for further period, on such mutually agreeable terms as may be agreed at the time of renewal, by both the parties, by executing and registering separate Lease Agreement.

3. RENT

- (a) The rent payable by the Lessee to the Lessor for the Schedule Property shall be Rs. _____/- (Rupees _____) only per annum per Acre. The portion of the land less than one Acre shall be calculated in terms of Square meter and the rent payable for the same shall be at Rs. _____/- per Square meter or part thereof, per annum.

OR

The rent payable by the Lessee to the Lessor after Commercial Operation of the power plant shall be Rs. _____ per unit of total power generated from the power

plant installed on the land of Lessor. Till the start of commercial operation of the plant, the rent shall be Rs. _____/- (Rupees _____) only per annum per Acre.

- (b) The annual rent shall be paid in twelve equal instalments and each instalment to be paid by 5th day of every month, by crediting the same to the Lessor's Bank Account the details of which may be furnished by the Lessor from time to time.

OR

In case of lease rent on the basis of Rs. ____ per unit, the monthly lease rent would be calculated on the basis of monthly electricity injected in to the grid from the power plant installed on the land of Lessor.

- (c) Lessor may opt for payment of lease rent directly from the Distribution company, which will sign Power Purchase Agreement with Lessee for the above-mentioned _____ Power Plant to be installed by Lessee. In such a case the Distribution company will pay the lease rent to Lessor on monthly basis from the proceeds payable to the Lessee in lieu of Power supplied by Lessee. In order to give this effect a suitable provision will be made in the PPA to be signed between Lessee and the Distribution Company.
- (d) [on mutual agreement between Lessor and Lessee] The rent hereby reserved shall be paid by enhancing the same at the end of every _____ year(s), at ____% on the rent hereby agreed.
- (e) If the Lessee delays the payment of rent by due date of every month, for any reason, the same shall be paid by adding the interest at the rate ____% for the said delayed period.

4. GENERAL TERMS

- i. In consideration of the rent herein agreed as payable to the Lessor being paid by the Lessee regularly and on complying other terms and conditions and covenants by the Lessee, the Lessee shall peacefully possess and enjoy the **Schedule Property** during the lease period without any interruption by the Lessor.

- ii. The Lessor shall allow the Lessee or its representatives to conduct survey and other related work.
- iii. The Lessor has no objections for the Lessee to establish the _____ Power Plant in the Schedule property which is the purpose of the grant of this lease and to that effect the Lessee entering into any agreement/s, deeds with companies, individuals, developers/third party etc. in respect of the Schedule property.
- iv. The Lessor has no objections for the Lessee or its representatives for installation of machineries, equipments, etc. for generation of _____ power in the Schedule property and all work relating to thereto including but not limited to laying poles, wires, etc.

5. EVENT OF SALE, ACCEPTANCE OF LEASE BY THE NEW OWNER

- (a) In the event of the owners transferring their rights/interest in any manner during the existence of the lease to any other person, the same may be allowed without affecting the rights of the Lessee under the Lease Agreement in any manner and the owners/purchasers/transferees shall inform the Lessee about the acquiring of the right/interest in respect of the leased property and on receipt of such information, the Lessee shall accept such new purchaser's/transferee's ownership of the land and obtain a written confirmation from such new owner/purchaser/transferee to the effect that he will be bound by the terms of the Lease Agreement.
- (b) In the event of the owners transferring their rights/interest to any other person, the same may be informed to the Lessee and the Lessor shall ascertain and obtain all the necessary documents from the transferee to the effect that the transferee will be bound by the terms and conditions of the Lease Agreement for the balance period of the lease or for using the said documents for renewal of the lease for the balance period.
- (c) During the subsistence of the lease, the Lessor shall not carry any activity, in the Schedule property, other than those agreed in this agreement;

- (d) The change in the legal status of the Lessee shall not affect the terms and conditions of this Agreement.
- (e) The original Lease Agreement shall be with the Lessee and the copy of the same will be with the Lessor.
- (f) In the event of any dispute in respect of the land, the Lessee shall deposit the rent in the concerned civil court. In the event of retention of the rent with the Lessee, the Lessee shall be pay the same together with interest thereon at the rate_% for such period.
- (g) The Lessee shall not offer or create any charge or encumbrance by offering the same as by way of mortgage, security, etc. in favour of any Banks or financial institutions in respect of the loans or advances or any other financial facilities that may be availed by the Lessee.
- (h) The owners shall pay the land tax/revenue in respect of the lands.

6. **PAYMENT OF STAMP DUTY AND REGISTRATION CHARGES:**

The stamp duty and other registration charges, as applicable for this Agreement of Lease shall be paid by the Lessee.

7. **FORCE MAJEURE:**

It is also agreed and understood between the parties that in case of any mishap due to fire, earthquake, strike, floods, tempest, war, riot, civil war or civil commotions, mob violence, civil disturbance, act of God or on account of terrorist attack, the Lessor shall not be liable for any loss or damage that may be occasioned to the Lessee/its merchandise.

8. **ADDRESSES FOR CORRESPONDENCE, ETC**

Any notice and/or communications between the Parties shall be deemed to be sufficient, if delivered by hand under acknowledgement or sent by registered post acknowledgement due to the following address or the address that may be intimated in writing to the Lessee by the Lessor from time to time:

LESSOR'S:

LESSEE'S:

9. LESSOR'S DUTIES, COVENANTS AND OBLIGATIONS

- a) The Lessor hereby covenants with the Lessee that the Lessee paying regularly the rents hereby reserved and performing and observing all the covenants of the Lessee herein contained, shall be entitled, during the subsistence of this lease to enjoy the Schedule property without let, hindrance or interference from the Lessor or any other person/s claiming through or under him; Still, in the event of the Lessee restrained from enjoying the peaceful possession of the Schedule property or on account of any action by the Government during the period of lease and in the event of dispossession of the Lessee from the Schedule property or any portion thereof forcibly, due to any default of the Lessor, the Lessor shall make good the reasonable loss that may be suffered by the Lessee.
- b) The Lessor shall offer necessary support and co-operation to the Lessee in its process to obtain required permission/s, approval/s, clearances, etc., from any Statutory Authority or other Local Bodies for the purpose of obtaining and licence, permissions, etc., for installation of power plant. However, obtaining such permission/s, approval/s, clearances, etc., shall be the sole responsibility of Lessee.

10. LESSEE'S COVENANT AND OBLIGATIONS

The Lessee hereby covenants with the Lessor as under:

- (a) The Schedule property shall be utilised for the purpose referred to in Clause (1) above;
- (b) The Lessee shall pay the rents (as per Clause (3)) regularly and promptly;

11. TERMINATION AND RE-ENTRY

The Lease shall be determinable under all or any of the following circumstances, namely

-
- i) by efflux of time;
- ii) in the event of breach by either party of the terms, conditions and covenants hereof;

- iii) if the Scheduled Premises or any part thereof is severely damaged or destroyed due to any unforeseen circumstances or civil commotion, act of God, etc., and these damages be not restored to by the LESSOR within a reasonable time or if the demised premises is acquired compulsorily by any authority;
- iv) After the expiry of lease period, the Lessee shall handover the land to the Lessor as it was existed previously at the time of this agreement (subject to normal wear and tear).

12. **VARIATION:**

The Lessor and the Lessee hereto acknowledge that this agreement supersedes all prior communications between them including all oral or written proposals. Any variation, addition and modifications of this agreement between the parties shall be valid only if in writing by the Lessor and Lessees authorized representative.

13. **ARBITRATION:**

- a) Any disputes or differences arising between the Parties hereto as to the effect, interpretation or application any of the clauses of this LEASE AGREEMENT or as to their rights, duties or liabilities thereunder, or as to any act, matter or thing arising out of, or consequent to, or in connection with this LEASE AGREEMENT shall be referred to and resolved by Arbitration by referring the same for arbitration to any retired District Judge and shall be resolved finally at his arbitration under Arbitration and Conciliation Act 1996 and its Amendments or any other Enactment. The Arbitration proceedings shall be held at and shall be in English/_____ Language.
- b) This LEASE AGREEMENT shall be governed by the laws of India. The Courts at _____ alone shall have the jurisdiction to entertain and or try any dispute arising out of or in connection with or in relation to the terms of this LEASE AGREEMENT.

IN WITNESS WHEREOF the parties hereto have executed these presents in the presence of the witnesses attesting hereunder on the day, month and year mentioned hereinabove.

LESSOR

LESSEE

WITNESSES:

1.

2.

SCHEDULE PROPERTY

All that piece and parcel of Barren/ Agricultural land measuring_____Acre

Kanal_____ marla_____ Share out of Hadbast No.
_____Khwat

No._____Khatoni No. _____Khasra No._____Mustil No.
_____Kila No.

_____situated at Village/City_____Tehsil

_____District and bounded on the:

(Note: The legal revenue terms to be changes to those prevalent in the State)

East by:

West by :

North by :

South by :

STANDARD
POWER PURCHASE AGREEMENT (PPA)
FOR
PROCUREMENT OF MW _____ POWER ON LONG TERM
BASIS

Between

[Name of Renewable Power Generator]

And

[Name of Distribution Company]

[month and year]

This Power Purchase Agreement is made on the _____ day of _____ of _____ at _____

Between

_____ [name of the Renewable Power Generator], _____, [details of Renewable Power Generator] (hereinafter referred to as "**Renewable Power Generator or RPG**", which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors and permitted assigns) as a Party of the **First Part**;

And

_____ [**Distribution Company**], a company incorporated under the Companies Act 1956, having its registered office at _____ (hereinafter referred to as "**DISCOM**", which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors and assignees) as a Party of the **Second Part**;

The RPG and DISCOM are individually referred to as 'Party' and collectively referred to as 'Parties'.

WHEREAS:

A. The Ministry of New and Renewable Energy [MNRE] has launched a scheme for farmers on 8th March 2019 and issued implementation guidelines on _____.

B. The MNRE has accorded a sanction and allotted a capacity of _____ MW to DISCOM for under the said scheme of 8th March 2019.

C. DISCOM had initiated a selection process for procurement of __ MW of the power generated from the Grid connected _____ Power Project on the terms and conditions contained in the EoI/RfS No. _____ dated _____.

D. The RPG has been selected in the Process for development, generation and supply of electricity from the _____ MW _____ Power Project to be established by RPG at _____ [location of proposed power plant] and electricity generated to be fed to the _____ [Name and location of 33/11 kV sub-station];

E. DISCOM has issued the Letter of Award No. dated. in favour of the RPG for development and establishment of the MW _____ Power Project as per the terms and conditions contained in the EoI/RfS.

F. The RPG has furnished the Performance Bank Guarantee in the sum of Rs. in favour of DISCOM as per the format prescribed by the DISCOM.

G. The RPG has fulfilled the terms and conditions for signing this Power Purchase Agreement as a definitive agreement for establishing the _____ Power Project of MW at,

for generation and sale of electricity by the RPG to DISCOM at _____ 33(or 66 or 110)/11 kV S/S;

H. The parties have agreed to execute this Power Purchase Agreement in terms of the EoI/RfS and the Letter of Award in regard to the terms and conditions for establishment of the _____ Power Project at, and for generation and supply of electricity by the RPG to DISCOM.

Now therefore, in consideration of the premises and mutual agreements, covenants and conditions set forth herein, it is hereby agreed by and between the Parties as follows:

ARTICLE 1: DEFINITIONS AND INTERPRETATION

1.1 *Definitions*

The terms used in this Agreement, unless as defined below or repugnant to the context, shall have the same meaning as assigned to them by the Electricity Act, 2003 and the rules or regulations framed there under, including those issued/framed by the Appropriate Commission (as defined hereunder), as amended or re-enacted from time to time.

"Act" or "Electricity Act, 2003"	shall mean the Electricity Act, 2003 and include any modifications, amendments and substitution from time to time;
"Agreement" or "Power Purchase Agreement" or "PPA"	shall mean this Power Purchase Agreement including its recitals and Schedules, amended or modified from time to time in accordance with the terms hereof;
"Appropriate Commission"	Unless otherwise stated, Appropriate Commission shall be the commission of the state where DISCOM is situated;
"Bill Dispute Notice"	shall mean the notice issued by a Party raising a Dispute regarding a Monthly Bill or a Supplementary Bill issued by the other Party;
"Business Day"	shall mean with respect to RPG and DISCOM, a day other than Sunday or a statutory holiday, on which the banks remain open for business in the State;
"Capacity Utilisation Factor" or "CUF"	shall have the same meaning as provided in CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2009 as amended from time to time; However, for avoidance of any doubt, it is clarified that the CUF shall be calculated on the Contracted Capacity; In any Contract Year, if 'X' MWh of energy has been metered out at the Delivery Point for 'Y' MW Project capacity, $CUF = (X \text{ MWh} / (Y \text{ MW} * 8766)) * 100\%$;
"Change in Law"	shall have the meaning ascribed thereto in Article 12 of this Agreement;

"Commercial Operation Date (COD)"	shall mean the date on which the commissioning certificate is issued upon successful commissioning (as per provisions of this Agreement) of the project;
"Competent Court of Law"	shall mean any court or tribunal or any similar judicial or quasi- judicial body in India that has jurisdiction to adjudicate upon issues relating to this Agreement;
"Consents, Clearances and	shall mean all authorizations, licenses, approvals, registrations, permits, waivers,
"Permits"	privileges, acknowledgements, agreements, or concessions required to be obtained from or provided by any concerned authority for the purpose of setting up of the generation facilities and/ or supply of power;
"Consultation Period"	shall mean the period of ninety (90) days or such other longer period as the Parties may agree, commencing from the date of issuance of a RPG Preliminary Default Notice or DISCOM Preliminary Default Notice as provided in Article 13 of this Agreement, for consultation between the Parties to mitigate the consequence of the relevant event having regard to all the circumstances;
"Contract Year"	shall mean the period beginning from the Effective Date and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that: (i) in the financial year in which the COD would occur, the Contract Year shall end on the date immediately before the COD and a new Contract Year shall commence once again from the COD and end on the immediately succeeding March 31, and thereafter each period of twelve (12) months commencing on April 1 and ending on March 31, and (ii) provided further that the last Contract Year of this Agreement shall end on the last day of the Term of this Agreement
"Contracted Capacity"	shall mean [Insert capacity] MW contracted with DISCOM for supply by the RPG to DISCOM at the Delivery Point from the_____Power Project;
"Delivery Point"	"Delivery Point" shall mean the point at the voltage level of 11kV or above of the 33/11 kV Sub-station. Metering shall be done at this interconnection point where the power is injected into the 33/11 kV Sub-station. For interconnection with grid and metering, the RPG shall abide by the relevant and applicable regulations, Grid Code notified by the State Commission and Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 as amended and revised from time to time, or orders passed thereunder by the Appropriate Commission or CEA. All charges and losses related to Transmission of power from project up to Delivery Point as notified by the Appropriate Commission shall be borne by the RPG.

"Dispute"	shall mean any dispute or difference of any kind between DISCOM and the RPG, in connection with or arising out of this Agreement including but not limited to any issue on the interpretation and scope of the terms of this Agreement as provided in Article 16 of this Agreement;
"Due Date"	Due Date shall mean the forty-fifth (45th) day after a Monthly Bill (including all the relevant documents) or a Supplementary Bill is received in hard copy and duly acknowledged by the DISCOM or, if such day is not a Business Day, the immediately succeeding Business Day, by which date such Monthly Bill or a Supplementary Bill is payable by the DISCOM.
"Effective Date"	shall have the meaning ascribed thereto in Article 2.1 of this Agreement;
"Electricity Laws"	shall mean the Electricity Act, 2003 and the rules and regulations made there under from time to time along with amendments thereto and replacements thereof and any other Law pertaining to electricity including regulations framed by the Appropriate Commission;
"Event of Default"	shall mean the events as defined in Article 13 of this Agreement;
"Expiry Date"	Shall mean the date occurring twenty five (25) years from the Commercial Operation Date subject to that the supply of power shall be limited for a period of 25 years from the COD unless extended by the Parties as per this Agreement;
"Financing Agreements"	shall mean the agreements pursuant to which the RPG has sought financing for the Power Project including the loan agreements, security documents, notes, indentures, security agreements, letters of credit and other documents, as may be amended, modified, or replaced from time to time, but without in anyway increasing the liabilities of DISCOM;
"Force Majeure" or "Force Majeure Event"	shall have the meaning ascribed thereto in Article 11 of this Agreement;
"Indian Governmental Instrumentality"	shall mean the Government of India, Governments of state of _____ and any ministry, department, board, authority, agency, corporation, commission under the direct or indirect control of Government of India or the above state Government or both, any political sub-division of any of them including any court or Appropriate Commission or tribunal or judicial or quasi-judicial body in India;
"Insurances"	shall mean the insurance cover to be obtained and maintained by the RPG in accordance with Article 8 of this Agreement;

"Interconnection Facilities"	shall mean the facilities on RPG's side of the Delivery Point for scheduling, transmitting and metering the electrical output in accordance with this Agreement and which shall include, without limitation, all other transmission lines and associated equipment, transformers, relay and switching equipment and protective devices, safety equipment and RTU, Data Transfer and Acquisition facilities for transmitting data subject to Article 7, the Metering System required for supply of power as per the terms of this Agreement;
"Invoice" or "Bill"	shall mean either a Monthly Bill / Supplementary Bill or a Monthly Invoice/ Supplementary Invoice raised by any of the Parties;
"Late Payment Surcharge"	shall have the meaning ascribed thereto in Article 10.3.3 of this Agreement;
"Law"	shall mean in relation to this Agreement, all laws including Electricity Laws in force in India and any statute, ordinance, regulation, notification or code, rule, or any interpretation of any of them by an Indian Governmental Instrumentality and having force of law and shall further include without limitation all applicable rules, regulations, orders, notifications by an Indian Governmental Instrumentality pursuant to or under any of them and shall include without limitation all rules, regulations, decisions and orders of the Appropriate Commissions;
"Letter of Credit" or "L/C"	shall have the meaning ascribed thereto in Article 10.4 of this Agreement;
"Letter of Award" or "LoA"	shall mean Letter of Award issued by the DISCOM to the RPG for the project;
"MNRE"	shall mean the Ministry of New and Renewable Energy, Government of India;
"Month"	shall mean a period of thirty (30) days from (and excluding) the date of the event, where applicable, else a calendar month;
"Party" and "Parties"	shall have the meaning ascribed thereto in the recital to this Agreement;
"Payment Security Mechanism"	shall have the meaning ascribed thereto in Article 10.4 of this Agreement;

"Power Project" or "Project"	shall mean the _____ power generation facility of Contracted Capacity of[Insert capacity] MW, located at....., [Insert name of the District and State] having a separate control system, metering and separate points of injection into the grid at Delivery point of 33/11 kV substation. The Project shall include all units and auxiliaries such as water supply, treatment or storage facilities, bay(s) for transmission system in the switchyard, dedicated transmission line up to the Delivery Point and all the other assets, buildings/structures, equipment, plant and machinery, facilities and related assets required for the efficient and economic operation of the power generation facility, whether completed or at any stage of development and construction or intended to be developed and constructed for the purpose of supply of power as per this Agreement;
"Preliminary Default Notice"	shall have the meaning ascribed thereto in Article 13 of this Agreement;
"Project Capacity"	shall mean the maximum AC capacity of the Project at the point of injection on which the Power Purchase Agreement has been signed.
"Prudent Utility Practices"	shall mean the practices, methods and standards that are generally accepted internationally from time to time by electric utilities for the purpose of ensuring the safe, efficient and economic design, construction, commissioning, operation and maintenance of power generation equipment and which practices, methods and standards shall be adjusted as necessary, to take account of: a) operation and maintenance guidelines recommended by the manufacturers of the plant and equipment to be incorporated in the Power Project; b) the requirements of Indian Law; and the physical conditions at the site of the Power Project
"Rebate"	shall have the same meaning as ascribed thereto in Article 10.3.5 of this Agreement;
"Rupees", "Rs.", ₹	shall mean Indian rupees, the lawful currency of India;
"Scheduled Commissioning Date" or "SCD" of the Project	Shall mean..... [Insert Date that is fifteen (15) Months from the Date of issuance of LoA by the DISCOM to the RPG];
"Tariff"	Shall have the same meaning as provided for in Article 9 of this Agreement;
"Tariff Payment"	shall mean the payments to be made under Monthly Bills as referred to in Article 10 and the relevant Supplementary Bills;
"Termination Notice"	shall mean the notice given by either Parties for termination of this Agreement in accordance with Article 13 of this Agreement;

"Term of Agreement"	shall have the meaning ascribed thereto in Article 2 of this Agreement;
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ARTICLE 2: TERM OF AGREEMENT

2.1 *Effective Date*

2.1.1 This Agreement shall come into effect from _____ and such date shall be referred to as the Effective Date.

2.2 *Term of Agreement*

2.2.1 Subject to Article 2.3 and 2.4 of this Agreement, this Agreement shall be valid for a term from the Effective Date until the Expiry Date. This Agreement may be extended for a further period at least one hundred eighty (180) days prior to the Expiry Date, on mutually agreed terms and conditions.

2.2.2 The RPG is free to operate their plants beyond the Expiry Date if other conditions like land lease / Right to Use of Land (as applicable), permits, approvals and clearances etc. allow. In such case unless otherwise agreed by the DISCOM, DISCOM shall not be obligated to procure power beyond the Expiry Date.

2.3 *Early Termination*

2.3.1 This Agreement shall terminate before the Expiry Date if either DISCOM or RPG terminates the Agreement, pursuant to Article 13 of this Agreement.

2.4 *Survival*

2.4.1 The expiry or termination of this Agreement shall not affect any accrued rights, obligations and liabilities of the Parties under this Agreement, including the right to receive penalty as per the terms of this Agreement, nor shall it affect the survival of any continuing obligations for which this Agreement provides, either expressly or by necessary implication, which are to survive after the Expiry Date or termination including those under Article 11 (Force Majeure), Article 13 (Events of Default and Termination), Article 14 (Liability and Indemnification), Article 16 (Governing Law and Dispute Resolution), Article 17 (Miscellaneous Provisions), and other Articles and Schedules of this Agreement which expressly or by their nature survive the Term or termination of this Agreement shall continue and survive any expiry or termination of this Agreement.

ARTICLE 3: CONDITIONS SUBSEQUENT

3.1 The RPG agrees and undertakes to make Project Financing Arrangements for its Project and shall provide necessary documents to DISCOM in this regard within six Months from the Date of issue of LoA by DISCOM for the project.

ARTICLE 4: CONSTRUCTION & DEVELOPMENT OF THE PROJECT

4.1 *RPG's Obligations*

4.1.1 The RPG undertakes to be responsible, at RPG's own cost and risk, for:

- a) The RPG shall be solely responsible and make arrangements for Land & associated infrastructure for development of the Project and for Connectivity with the 33/11 kV sub-station for confirming the evacuation of power by the Scheduled Commissioning date or COD, whichever is earlier, and all clearances related thereto;
The RPG shall furnish the necessary documents to establish possession in the name of the Project Developer of the required land/ Lease Agreement;
- b) obtaining all Consents, Clearances and Permits as required and maintaining all documents.
- c) Designing, constructing, erecting, commissioning, completing and testing the Power Project in accordance with the applicable Law, the Grid Code, the terms and conditions of this Agreement and Prudent Utility Practices.
- d) the commencement of supply of power up to the Contracted Capacity to DISCOM no later than the Scheduled Commissioning Date and continuance of the supply of power throughout the term of the Agreement;
- e) Connecting the Power Project switchyard with the Interconnection Facilities at the Delivery Point. The RPG shall make adequate arrangements to connect the Power Project switchyard with the Interconnection Facilities at Interconnection / Metering / Delivery Point.
- f) owning the Power Project throughout the Term of Agreement free and clear of encumbrances, except those expressly permitted under Article 15;
- f) fulfilling all obligations undertaken by the RPG under this Agreement.
- g) The RPG shall be responsible to for directly coordinating and dealing with the DISCOM, and other authorities in all respects in regard to declaration of availability, scheduling and dispatch of Power and due compliance with deviation and settlement mechanism and the applicable Grid code/State Regulations.

4.2 *Purchase and sale of Contracted Capacity*

4.2.1 Subject to the terms and conditions of this Agreement, the RPG undertakes to sell to DISCOM and DISCOM undertakes to pay Tariff for all the energy supplied at the Delivery Point corresponding to the Contracted Capacity.

4.3 *Right to Contracted Capacity & Energy*

4.3.1 DISCOM, in any Contract Year shall not be obliged to purchase any additional energy from the RPG beyond the contract capacity. If for any Contract Year except for the first year of operation, it is found that the RPG has not been able to generate minimum energy of Million kWh (MU) till the end of 10 years from the COD and..... Million kWh (MU) for the rest of the Term of the Agreement, on account of reasons solely attributable to the RPG, the non-compliance by RPG shall make the RPG liable to pay the compensation. For the first year of operation, the above limits shall be considered on pro-rata basis. The lower limit will, however be relaxable by DISCOM to the extent

of grid non-availability for evacuation which is beyond the control of the RPG. This compensation shall be applied to the amount of shortfall in generation during the Contract Year. The amount of such penalty shall be as determined by the Appropriate Commission, and such penalty shall ensure that the DISCOM is offset for all potential costs associated with low generation and supply of power under the PPA. However, the minimum compensation payable to DISCOM by the RPG shall be 25%(twenty-five percent) of the cost of this shortfall in energy terms, calculated at PPA tariff. This compensation shall not be applicable in events of Force Majeure identified under PPA.

4.3.2 In case at any point of time, the peak of capacity reached is higher than the contracted capacity and causes disturbance in the system at the point where power is injected, the RPG will have to forego the excess generation and reduce the output to the contract capacity and shall also have to pay the penalty/charges (if applicable) as per applicable regulations.

4.4 Extensions of Time

4.4.1 In the event that the RPG is prevented from performing its obligations under Article 4.1 by the Scheduled Commissioning Date due to:

- a) any DISCOM Event of Default; or
- b) Force Majeure Events affecting DISCOM, or
- c) Force Majeure Events affecting the RPG,

the Scheduled Commissioning Date and the Expiry Date shall be deferred, subject to Article 4.4.5, for a reasonable period but not less than 'day for day' basis, to permit the RPG or DISCOM through the use of due diligence, to overcome the effects of the Force Majeure Events affecting the RPG or DISCOM, or till such time such Event of Default is rectified by DISCOM.

4.4.2 In case of extension due to reasons specified in Article 4.4.1(b) and (c), and if such Force Majeure Event continues even after a maximum period of three (3) months, any of the Parties may choose to terminate the Agreement as per the provisions of Article 13.5. In case neither party terminates the agreement under this clause, the agreement shall stand terminated on the expiry of twelve (12) months of the continuation of the Force majeure event unless the parties mutually agree to extend the agreement for the further period.

4.4.3 If the Parties have not agreed, within thirty (30) days after the affected Party's performance has ceased to be affected by the relevant circumstance, on the time period by which the Scheduled Commissioning Date or the Expiry Date should be deferred, any Party may raise the Dispute to be resolved in accordance with Article 16.

4.4.4 As a result of such extension, the newly determined Scheduled Commissioning Date and newly determined Expiry Date shall be deemed to be the Scheduled Commissioning Date and the Expiry Date for the purposes of this Agreement.

4.4.5 Notwithstanding anything to the contrary contained in this Agreement, any extension of the Scheduled Commissioning Date arising due to any reason envisaged in this Agreement shall not be allowed beyond the date pursuant to Article 4.5.2.

4.4.6 Delay in commissioning of the project beyond the scheduled commissioning date for reasons other than those specified in Article 4.4.1 shall be an event of default on part of the RPG and shall be subject to the consequences specified in the Article 4.5.

4.5 *Liquidated Damages not amounting to penalty for delay in Commissioning*

4.5.1 If the RPG is unable to commission the Project by the Scheduled Commissioning Date other than for the reasons specified in Article 4.4.1, the RPG shall pay to DISCOM, damages for the delay in such commissioning and making the Contracted Capacity available for dispatch by the Scheduled Commissioning Date as per the following:

Delay beyond the Scheduled Commissioning Date upto (& including) the date as on fifteen months from the Date of issue of LoA: The total Performance Bank Guarantee amount shall be encashed on per day basis and proportionate to the balance capacity not commissioned.

4.5.2 The maximum time period allowed for commissioning of the full Project Capacity with encashment of Performance Bank Guarantee shall be limited to 21 Months from the Date of issue of LoA. In case, the Commissioning of the Project is delayed beyond 21 Months from the Date of issue of LoA, it shall be considered as an RPG Event of Default and provisions of Article 13 shall apply and the Contracted Capacity shall stand reduced / amended to the Project Capacity Commissioned within 21 Months of the Date of issue of LoA and the PPA for the balance Capacity will stand terminated and shall be reduced from the project capacity.

4.5.3 The RPG further acknowledge that the amount of the liquidated damages fixed is genuine and reasonable pre-estimate of the damages that may be suffered by DISCOM.

4.6 *Acceptance/Performance Test*

4.6.1 Prior to synchronization of the Power Project, the RPG shall be required to get the Project certified for the requisite acceptance/performance test as may be laid down by respective authorities.

4.7 *Third Party Verification*

4.7.1 The RPG shall be further required to provide entry to the site of the Power Project free of all encumbrances at all times during the Term of the Agreement to DISCOM and a third Party nominated by any Indian Governmental Instrumentality for inspection and verification of the works being carried out by the RPG at the site of the Power Project.

4.7.2 The third party may verify the construction works/operation of the Power Project being carried out by the RPG and if it is found that the construction works/operation of the Power Project is not as per the Prudent Utility Practices, it may seek clarifications from RPG or require the works to be stopped or to comply with the instructions of such third party.

4.8 Breach of Obligations

4.8.1 The Parties herein agree that during the subsistence of this Agreement, subject to DISCOM being in compliance of its obligations & undertakings under this Agreement, the RPG would have no right to negotiate or enter into any dialogue with any third party for the sale of Contracted Capacity of power which is the subject matter of this Agreement. It is the specific understanding between the Parties that such bar will apply throughout the entire term of this Agreement.

4.9 Generation compensation for Off-take constraints

4.9.1 Generation Compensation in offtake constraints due to Grid Unavailability: During the operation of the plant, there can be some periods where the Project can generate power but due to temporary transmission unavailability, the power is not evacuated, for reasons not attributable to the RPG. In such cases, subject to the submission of documentary evidences from the competent authority, the generation compensation shall be restricted to the following and there shall be no other claim, directly or indirectly against DISCOM:

Duration of Grid unavailability	Provision for Generation Compensation
Grid unavailability in a contract year as defined in the PPA: (only period from 8 am to 6 pm to be counted):	$\text{Generation Loss} = [(\text{Average Generation per hour during the Contract Year}) \times (\text{number of hours of grid unavailability during the Contract Year})]$ <p>Where, Average Generation per hour during the Contract Year (kWh) = Total generation in the Contract Year (kWh) ÷ Total hours of generation in the Contract Year.</p>

The excess generation by the RPG equal to this generation loss shall be procured by DISCOM at the PPA tariff so as to offset this loss in the succeeding 3 (three) Contract Years.

4.9.2 Offtake constraints due to Backdown: The RPG and DISCOM shall follow the forecasting and scheduling process as per the regulations in this regard by the Appropriate Commission. In the eventuality of backdown, subject to the submission of documentary evidences from the competent authority, the RPG shall be eligible for a minimum generation compensation, from DISCOM, restricted to the following and there shall be no other claim, directly or indirectly against DISCOM:.

Duration of Backdown	Provision for Generation Compensation
Hours of Backdown during a monthly billing cycle.	$\text{Minimum Generation Compensation} = 50\% \text{ of } [(\text{Average Generation per hour during the month}) \times (\text{number of backdown hours during the month})] \times \text{PPA tariff}$ <p>Where, Average Generation per hour during the month (kWh) = Total generation in the month (kWh) ÷ Total hours of generation in the month</p>

The RPG shall not be eligible for any compensation in case the Backdown is on account of events like consideration of grid security or safety of any equipment or personnel or other such conditions. The Generation Compensation shall be paid as part of the energy bill for the successive month after JMR.

ARTICLE 5: SYNCHRONISATION, COMMISSIONING AND COMMERCIAL OPERATION

5.1 *Synchronization, Commissioning and Commercial Operation*

5.1.1 The RPG shall give the DISCOM at least thirty (30) days' advanced preliminary written notice and at least fifteen (15) days' advanced final written notice, of the date on which it intends to synchronize the Power Project to the Grid System.

5.1.2 Subject to Article 5.1.1, the Power Project may be synchronized by the RPG to the Grid System when it meets all the connection conditions prescribed in applicable Grid Code then in effect and otherwise meets all other Indian legal requirements for synchronization to the Grid System.

5.1.3 The synchronization equipment and all necessary arrangements / equipment including RTU for scheduling of power generated from the Project and transmission of data to the concerned authority as per applicable regulation shall be installed by the RPG at its generation facility of the Power Project at its own cost. The RPG shall synchronize its system with the Grid System only after the approval of synchronization scheme is granted by the head of the concerned substation/ and checking/verification is made by the concerned authorities of the DISCOM.

5.1.4 The RPG shall immediately after each synchronization/tripping of generator, inform the substation of the Grid System to which the Power Project is electrically connected in accordance with applicable Grid Code. In addition, the RPG will inject in-firm power to grid time to time to carry out operational/ functional test prior to commercial operation. For avoidance of doubt, it is clarified that Synchronization / Connectivity of the Project with the grid shall not to be considered as Commissioning of the Project.

5.1.5 The RPG shall commission the Project within fifteen (15) Months from the Date of issue of LoA. Declaration of COD shall only be done upon the successful visit by the Commissioning Committee.

5.1.6 The Parties agree that for the purpose of commencement of the supply of electricity by RPG to DISCOM, liquidated damages for delay etc., the Scheduled Commissioning Date as defined in this Agreement shall be the relevant date.

ARTICLE 6: DISPATCH AND SCHEDULING

6.1 Dispatch and Scheduling

6.1.1 The RPG shall be required to schedule its power as per the applicable regulations of SERC /SLDC or any other competent agency and same being recognized by the SLDC or any other competent authority / agency as per applicable regulation/ law / direction and maintain compliance to the applicable Codes/ Grid Code requirements and directions, if any, as specified by concerned SLDC from time to time. Any deviation from the Schedule will attract the provisions of applicable regulation / guidelines / directions and any financial implication on account of this shall be on the account of the RPG.

6.1.2 The RPG shall be responsible for directly coordinating and dealing with the DISCOM, State Load Dispatch Centers, and other authorities in all respects in regard to declaration of availability, scheduling and despatch of Power and due compliance with deviation and settlement mechanism and the applicable Grid code Regulations.

6.1.3 The RPG shall be responsible for any deviation from scheduling and for any resultant liabilities on account of charges for deviation as per applicable regulations. UI charges on this account shall be directly paid by the RPG.

6.1.4 Auxiliary power consumption will be treated as per the concerned state regulations.

ARTICLE 7: METERING

7.1 Meters

7.1.1 For installation of Meters, Meter testing, Meter calibration and Meter reading and all matters incidental thereto, the RPG and DISCOM shall follow and be bound by the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, the Grid Code, as amended and revised from time to time.

7.1.2 The RPG shall bear all costs pertaining to installation, testing, calibration, maintenance, renewal and repair of meters at RPG's side of Delivery Point.

7.1.3 In addition to ensuring compliance of the applicable codes, the RPG shall install Main & Check meters at the Delivery Point, along with Stand-by meter(s) as per the applicable regulations of the State where the Project is located.

7.2 Reporting of Metered Data and Parameters

7.2.1 The grid connected renewable power plants will install necessary equipment for regular monitoring of required data and simultaneously for monitoring of the electric power generated from the Project.

7.2.2 Online arrangement would have to be made by the RPG for submission of above data regularly for the entire period of this Power Purchase Agreement to the DISCOM, to central portal of MNRE and concerned agency as per applicable regulation / directions.

7.2.3 Reports on above parameters on monthly basis (or as required by regulation / guidelines) shall be submitted by the RPG to Ministry of New and Renewable Energy/National Institute of Solar Energy through DISCOM for entire period of PPA.

ARTICLE 8: INSURANCES

8.1 Insurance

8.1.1 The RPG shall effect and maintain or cause to be effected and maintained, at its own cost and expense, throughout the Term of PPA, Insurances against such risks to keep the Project in good condition and shall take Industrial All Risk insurance policy covering risks against any loss or damage, with such deductibles and with such endorsements and co-insured(s), which the Prudent Utility Practices would ordinarily merit maintenance of and as required under the Financing Agreements, and under the applicable laws.

8.2 Application of Insurance Proceeds

8.2.1 In case of the Project not being implemented through Financing Agreement(s), save as expressly provided in this Agreement or the Insurances, the proceeds of any insurance claim made due to loss or damage to the Power Project or any part of the Power Project shall be first applied to reinstatement, replacement or renewal of such loss or damage.

In case of the Project being financed through Financing Agreement(s), save as expressly provided in this Agreement or the Insurances, the proceeds of any insurance claim made due to loss or damage to the Power Project or any part of the Power Project shall be applied as per such Financing Agreements.

8.2.2 If a Force Majeure Event renders the Power Project no longer economically and technically viable and the insurers under the Insurances make payment on a "total loss" or equivalent basis, DISCOM shall have claim on such proceeds of such Insurance limited to outstanding dues of DISCOM against RPG.

8.3 Effect on liability of DISCOM

8.3.1 Notwithstanding any liability or obligation that may arise under this Agreement, any loss, damage, liability, payment, obligation or expense which is insured or not or for which the RPG can claim compensation, under any Insurance shall not be charged to or payable by DISCOM. It is for the RPG to ensure that appropriate insurance coverage is taken for payment by the insurer for the entire loss and there is no under insurance or short adjustment etc.

ARTICLE 9 : APPLICABLE TARIFF

9.1 The RPG shall be entitled to receive the Tariff of Rs..... / kWh, fixed for the entire term of this Agreement, with effect from the COD, for the power sold to the DISCOM as reflected in the Energy Accounts.

ARTICLE 10: BILLING AND PAYMENT

10.1 General

10.1.1 From the commencement of supply of power, DISCOM shall pay to the RPG the monthly Tariff Payments subject to the adjustments as per provisions of this Agreement including Article 6, in accordance with Article 9. All Tariff Payments by DISCOM shall be in Indian Rupees.

10.1.2 The RPG shall be required to make arrangements and payments for import of energy (if any) as per applicable regulations.

10.2 Delivery and Content of Monthly Bills/Supplementary Bills

10.2.1 The RPG shall issue to DISCOM hard copy of a signed Monthly Bill for the immediately preceding Month based on the JMR/Energy Account along with all relevant documents (payments made by RPG for drawl of power, payment of reactive energy charges, Metering charges or any other charges as per regulations of SERC/SLDC, if applicable.)

Each Monthly Bill shall include all charges as per this Agreement for the energy supplied for the relevant Month based on JMR/Energy Accounts. The Monthly Bill amount shall be the product of the energy as per Energy Accounts and the Applicable Tariff. Energy drawn from the grid will be regulated as per the regulations of respective State the Project is located in.

10.3 Payment of Monthly Bills

10.3.1 DISCOM shall pay the amount payable under the Monthly Bill by the Due Date to such account of the RPG, as shall have been previously notified by the RPG.

10.3.2 All payments required to be made under this Agreement shall also include any deduction or set off for:

- i) deductions required by the Law; and
- ii) Amount claimed by DISCOM, if any, from the RPG, will be adjusted from the monthly energy payment.

The RPG shall open a bank account (the "RPG's Designated Account") for all Tariff Payments to be made by DISCOM to the RPG, and notify DISCOM of the details of such account at least sixty (60) Days before the dispatch of the first Monthly Bill.

10.3.3 Late Payment Surcharge

In the event of delay in payment of a Monthly Bill by DISCOM beyond thirty (30) days of its Due

Date, a Late Payment Surcharge shall be payable to the RPG at the rate of 1.25% per month on the outstanding amount calculated on a day to day basis. The Late Payment Surcharge shall be claimed by the RPG through the Supplementary Bill.

10.3.5 *Rebate*

For payment of any Bill on or before Due Date, the following Rebate shall be paid by the RPG to DISCOM in the following manner and the RPG shall not raise any objections to the payments made under this article.

- a) A Rebate of 2% shall be payable to the DISCOM for the payments made within a period of seven clear working days of the presentation of hard copy of Bill along with required supporting documents at DISCOM office.
- b) Any payments made after seven clear working days of the date of presentation of hard copy of the Bill along with the required supporting documents at DISCOM office up to the Due Date shall be allowed a rebate of 1 %.
- c) For the above purpose, the date of presentation of Bill shall be the next Business Day of delivery of the physical copy of the Bill at DISCOM. .
- d) No Rebate shall be payable on the Bills raised on account of Change in Law relating to taxes, duties, cess etc. and on Supplementary Bill.

For the above purpose date of presentation of bill shall be the same day of delivery in hard copy. However, for consideration of rebate, next business day shall be considered.

10.4 *Payment Security Mechanism*

Letter of Credit (LC):

10.4.1 DISCOM shall provide to the RPG, in respect of payment of its Monthly Bills and/or Supplementary Bills, a monthly unconditional, revolving and irrevocable letter of credit ("Letter of Credit"), opened and maintained which may be drawn upon by the RPG in accordance with this Article.

10.4.2 Not later than one (1) Month before the start of supply, DISCOM through a scheduled bank open a Letter of Credit in favour of the RPG, to be made operative from a date prior to the Due Date of its first Monthly Bill under this Agreement. The Letter of Credit shall have a term of twelve (12) Months and shall be renewed annually, for an amount equal to:

- i) for the first Contract Year, equal to the estimated average monthly billing;
- ii) for each subsequent Contract Year, equal to the average of the monthly billing of the previous Contract Year.

10.4.3 Provided that the RPG shall not draw upon such Letter of Credit prior to the Due Date of the relevant Monthly Bill and/or Supplementary Bill, and shall not make more than one drawal in a Month.

10.4.4 Provided further that if at any time, such Letter of Credit amount falls short of the amount specified in Article 10.4.2 due to any reason whatsoever, DISCOM shall restore such shortfall within fifteen (15) days.

10.4.5 DISCOM shall cause the scheduled bank issuing the Letter of Credit to intimate the RPG, in writing regarding establishing of such irrevocable Letter of Credit.

10.4.6 DISCOM shall ensure that the Letter of Credit shall be renewed not later than its expiry.

10.4.7 All costs relating to opening, maintenance of the Letter of Credit shall be borne by DISCOM.

10.4.8 If DISCOM fails to pay undisputed Monthly Bill or Supplementary Bill or a part thereof within and including the Due Date, then, subject to Article 10.4.6 & 10.5.2, the RPG may draw upon the Letter of Credit, and accordingly the bank shall pay without any reference or instructions from DISCOM, an amount equal to such Monthly Bill or Supplementary Bill or part thereof, in accordance with Article 10.4.3 above, by presenting to the scheduled bank issuing the Letter of Credit, the following documents:

- i) a copy of the Monthly Bill or Supplementary Bill which has remained unpaid to RPG and;
- ii) a certificate from the RPG to the effect that the bill at item (i) above, or specified part thereof, is in accordance with the Agreement and has remained unpaid beyond the Due Date;

10.5 Disputed Bill

10.5.1 If the DISCOM does not dispute a Monthly Bill or a Supplementary Bill raised by the RPG within fifteen (15) days of receiving such Bill shall be taken as conclusive.

10.5.2 If the DISCOM disputes the amount payable under a Monthly Bill or a Supplementary Bill, as the case may be, it shall pay undisputed amount of the invoice amount and it shall within fifteen (15) days of receiving such Bill, issue a notice (the "Bill Dispute Notice") to the invoicing Party setting out:

- i) the details of the disputed amount;
- ii) its estimate of what the correct amount should be; and iii) all written material in support of its claim.

10.5.3 If the RPG agrees to the claim raised in the Bill Dispute Notice issued pursuant to Article 10.5.2, the RPG shall revise such Bill and present along with the next Monthly Bill. In such a case excess amount shall be refunded along with interest at the same rate as Late Payment Surcharge, which shall be applied from the date on which such excess payment was made by the disputing Party to the invoicing Party and up to and including the date on which such payment has been received as refund.

10.5.4 If the RPG does not agree to the claim raised in the Bill Dispute Notice issued pursuant to Article 10.5.2, it shall, within fifteen (15) days of receiving the Bill Dispute Notice, furnish a notice (Bill Disagreement Notice) to the DISCOM providing:

- i) reasons for its disagreement;
- ii) its estimate of what the correct amount should be; and iii) all written material in support of its counter-claim.

10.5.5 Upon receipt of the Bill Disagreement Notice by the DISCOM under Article 10.5.4, authorized representative(s) or a director of the board of directors/ member of board of the DISCOM and RPG shall meet and make best endeavours to amicably resolve such dispute within fifteen (15) days of receipt of the Bill Disagreement Notice.

10.5.6 If the Parties do not amicably resolve the Dispute within fifteen (15) days of receipt of Bill Disagreement Notice pursuant to Article 10.5.4, the matter shall be referred to Dispute resolution in accordance with Article 16.

10.5.7 For the avoidance of doubt, it is clarified the despite a Dispute regarding an invoice, DISCOM shall, without prejudice to its right to Dispute, be under an obligation to make payment of undisputed amount of the invoice amount in the Monthly Bill.

10.6 Quarterly and Annual Reconciliation

10.6.1 The Parties acknowledge that all payments made against Monthly Bills and Supplementary Bills shall be subject to quarterly reconciliation within 30 days of the end of the quarter at the beginning of the following quarter of each Contract Year and annual reconciliation at the end of each Contract Year within 30 days to take into account the Energy Accounts, Tariff adjustment payments, Tariff Rebate, Late Payment Surcharge, or any other reasonable circumstance provided under this Agreement.

10.6.2 The Parties, therefore, agree that as soon as all such data in respect of any quarter of a Contract Year or a full Contract Year as the case may be has been finally verified and adjusted, the RPG and DISCOM shall jointly sign such reconciliation statement. Within fifteen (15) days of signing of a reconciliation statement, the RPG shall make appropriate adjustments in the next Monthly Bill. Late Payment Surcharge/ interest shall be payable in such a case from the date on which such payment had been made to the invoicing Party or the date on which any payment was originally due, as may be applicable. Any Dispute with regard to the above reconciliation shall be dealt with in accordance with the provisions of Article 16.

10.7 Payment of Supplementary Bill

10.7.1 RPG may raise a ("Supplementary Bill") for payment on account of:

- i) Adjustments required by the Energy Accounts (if applicable); or
- ii) Change in Law as provided in Article 12

And such Supplementary Bill shall be paid by the other Party.

10.7.2 DISCOM shall remit all amounts due under a Supplementary Bill raised by the RPG to the RPG's Designated Account by the Due Date, except open access charges, RLDC or scheduling charges and transmission charges (if applicable). For Supplementary Bill on account of adjustment required by energy account, Rebate as applicable to Monthly Bills pursuant to Article 10.3.5 shall equally apply. No surcharge will be applicable other than that on the monthly energy payment and associated debit and credit note.

10.7.3 In the event of delay in payment of a Supplementary Bill by either Party beyond its Due Date, a Late Payment Surcharge shall be payable at the same terms applicable to the Monthly Bill in Article 10.3.3.

ARTICLE 11: FORCE MAJEURE

11.1 Definitions

11.1.1 In this Article, the following terms shall have the following meanings:

11.2 Affected Party

11.2.1 An affected Party means DISCOM or the RPG whose performance has been affected by an event of Force Majeure.

11.3 Force Majeure

11.3.1 A 'Force Majeure' means any event or circumstance or combination of events those stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:

- a) Act of God, including, but not limited to lightning, drought, fire and explosion (to the extent originating from a source external to the site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon or tornado if and only if it is declared / notified by the competent state / central authority / agency (as applicable);
- b) any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action if and only if it is declared / notified by the competent state / central authority / agency (as applicable); or
- c) radioactive contamination or ionising radiation originating from a source in India or resulting from another Force Majeure Event mentioned above excluding circumstances where the source or cause of contamination or radiation is brought or has been brought into or near the Power Project by the Affected Party or those employed or engaged by the Affected Party.

11.4 Force Majeure Exclusions

11.4.1 Force Majeure shall not include (i) any event or circumstance which is within the reasonable control of the Parties and (ii) the following conditions, except to the extent that they are consequences of an event of Force Majeure:

- a. Unavailability, late delivery, or changes in cost of the plant, machinery, equipment, materials, spare parts or consumables for the Power Project;
- b. Delay in the performance of any contractor, sub-contractor or their agents ;
- c. Non-performance resulting from normal wear and tear typically experienced in power generation materials and equipment;
- d. Strikes at the facilities of the Affected Party;
- e. Insufficiency of finances or funds or the agreement becoming onerous to perform; and
- f. Non-performance caused by, or connected with, the Affected Party's:
 - i. Negligent or intentional acts, errors or omissions;
 - ii. Failure to comply with an Indian Law; or
 - iii. Breach of, or default under this Agreement.

11.5 Notification of Force Majeure Event

11.5.1 The Affected Party shall give notice to the other Party of any event of Force Majeure as soon as reasonably practicable, but not later than seven (7) days after the date on which such Party knew or should reasonably have known of the commencement of the event of Force Majeure. If an event of Force Majeure results in a breakdown of communications rendering it unreasonable to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably practicable after reinstatement of communications, but not later than one (1) day after such reinstatement.

11.5.2 Provided that such notice shall be a pre-condition to the Affected Party's entitlement to claim relief under this Agreement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed. The Affected Party shall give the other Party regular (and not less than monthly) reports on the progress of those remedial measures and such other information as the other Party may reasonably request about the Force Majeure Event.

11.5.3 The Affected Party shall give notice to the other Party of (i) the cessation of the relevant event of Force Majeure; and (ii) the cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this Agreement, as soon as practicable after becoming aware of each of these cessations.

11.6 Duty to Perform and Duty to Mitigate

11.6.1 To the extent not prevented by a Force Majeure Event pursuant to Article 11.3, the Affected Party shall continue to perform its obligations pursuant to this Agreement. The Affected Party shall use its reasonable efforts to mitigate the effect of any Force Majeure Event as soon as practicable.

11.7 Available Relief for a Force Majeure Event

11.7.1 Subject to this Article 11:

- (a) no Party shall be in breach of its obligations pursuant to this Agreement except to the extent that the performance of its obligations was prevented, hindered or delayed due to a Force Majeure Event;
- (b) every Party shall be entitled to claim relief in relation to a Force Majeure Event in regard to its obligations;
- (c) For avoidance of doubt, neither Party's obligation to make payments of money due and payable prior to occurrence of Force Majeure events under this Agreement shall be suspended or excused due to the occurrence of a Force Majeure Event in respect of such Party.
- (d) Provided that no payments shall be made by either Party affected by a Force Majeure Event for the period of such event on account of its inability to perform its obligations due to such Force Majeure Event.

ARTICLE 12: CHANGE IN LAW

12.1 Definitions

In this Article 12, the term Change in Law shall refer to the occurrence of any of the following events pertaining to this project only after the last date of the bid submission, including

- (i) the enactment of any new law; or
 - (ii) an amendment, modification or repeal of an existing law; or
 - (iii) the requirement to obtain a new consent, permit or license; or
 - (iv) any modification to the prevailing conditions prescribed for obtaining an consent, permit or license, not owing to any default of the RPG; or (v) any change in the rates of any Taxes including any duties and cess or Introduction of any new tax made applicable for setting up the power project and supply of power from the Power project by the RPG Which have a direct effect on the Project.
- However, Change in Law shall not include (i) any change in taxes on corporate income or (ii) any change in any withholding tax on income or dividends distributed to the shareholders of the RPG, or (iii) any change on account of regulatory measures by the Appropriate Commission.

In the event a Change in Law results in any adverse financial loss/ gain to the RPG then, in order to ensure that the RPG is placed in the same financial position as it would have been had it not been for the occurrence of the Change in Law, the RPG/ DISCOM shall be entitled to compensation by the other party, as the case may be, subject to the condition that the quantum and mechanism of compensation payment shall be determined and shall be effective from such date as may be decided by the Appropriate Commission.

In the event of any decrease in the recurring/ nonrecurring expenditure by the RPG or any income to the RPG on account of any of the events as indicated above, RPG shall file an application to the Appropriate Commission no later than sixty (60) days from the occurrence of such event, for seeking approval of Change in Law. In the event of the RPG failing to comply with the above requirement, in case of any gain to the RPG, DISCOM shall withhold the monthly tariff payments on immediate basis, until compliance of the above requirement by the RPG.

12.2 Relief for Change in Law

12.2.1 The aggrieved Party shall be required to approach the Appropriate Commission for seeking approval of Change in Law.

12.2.2 The decision of the Appropriate Commission to acknowledge a Change in Law and the date from which it will become effective, provide relief for the same, shall be final and governing on both the Parties.

ARTICLE 13: EVENTS OF DEFAULT AND TERMINATION

13.1 RPG Event of Default

13.1.1 The occurrence and/or continuation of any of the following events, unless any such event occurs as a result of a Force Majeure Event or a breach by DISCOM of its obligations under this Agreement, shall constitute an RPG Event of Default:

- (i) the failure to commence supply of power to DISCOM up to the Contracted Capacity, by the end of the period specified in Article 4, or failure to continue supply of Contracted Capacity to DISCOM after Commercial Operation Date throughout the term of this Agreement, or if
 - a) the RPG assigns, mortgages or charges or purports to assign, mortgage or charge any of its assets or rights related to the Power Project in contravention of the provisions of this Agreement; or
 - b) the RPG transfers or novates any of its rights and/ or obligations under this agreement, in a manner contrary to the provisions of this Agreement; except where such transfer
 - is in pursuance of a Law; and does not affect the ability of the transferee to perform, and such transferee has the financial capability to perform, its obligations under this Agreement or
 - is to a transferee who assumes such obligations under this Agreement and the Agreement remains effective with respect to the transferee;
- (ii) if (a) the RPG becomes voluntarily or involuntarily the subject of any bankruptcy or insolvency or winding up proceedings and such proceedings remain uncontested for a period of thirty (30) days, or (b) any winding up or bankruptcy or insolvency order is passed against the RPG, or (c) the RPG goes into liquidation or dissolution or has a receiver or any similar officer appointed over all or substantially all of its assets or official liquidator is appointed to manage its affairs, pursuant to Law, provided that a dissolution or liquidation of the RPG will not be a RPG Event of Default if such dissolution or liquidation is for the purpose of a merger, consolidation or

reorganization and where the resulting company retains creditworthiness similar to the RPG and expressly assumes all obligations of the RPG under this Agreement and is in a position to perform them; or

- (iii) the RPG repudiates this Agreement and does not rectify such breach within a period of thirty (30) days from a notice from DISCOM in this regard; or
- (iv) except where due to any DISCOM's failure to comply with its material obligations, the RPG is in breach of any of its material obligations pursuant to this Agreement, and such material breach is not rectified by the RPG within thirty (30) days of receipt of first notice in this regard given by DISCOM.
- (v) occurrence of any other event which is specified in this Agreement to be a material breach/default of the RPG.
- (vi) except where due to any DISCOM's failure to comply with its material obligations, the RPG is in breach of any of its material obligations pursuant to this Agreement, and such material breach is not rectified by the RPG within thirty (30) days of receipt of first notice in this regard given by DISCOM.

13.2 DISCOM Event of Default

13.2.1 The occurrence and the continuation of any of the following events, unless any such event occurs as a result of a Force Majeure Event or a breach by the RPG of its obligations under this Agreement, shall constitute the Event of Default on the part of defaulting DISCOM:

- (i) DISCOM fails to pay (with respect to a Monthly Bill or a Supplementary Bill), subject to Article 10.5, for a period of ninety (90) days after the Due Date and the RPG is unable to recover the amount outstanding to the RPG through the Letter of Credit,
- (ii) DISCOM repudiates this Agreement and does not rectify such breach even within a period of sixty (60) days from a notice from the RPG in this regard; or
- (iii) except where due to any RPG's failure to comply with its obligations, DISCOM is in material breach of any of its obligations pursuant to this Agreement, and such material breach is not rectified by DISCOM within sixty (60) days of receipt of notice in this regard from the RPG to DISCOM; or

if

- DISCOM becomes voluntarily or involuntarily the subject of any bankruptcy or insolvency or winding up proceedings and such proceedings remain uncontested for a period of sixty (60) days, or
- any winding up or bankruptcy or insolvency order is passed against DISCOM, or
- DISCOM goes into liquidation or dissolution or a receiver or any similar officer is appointed over all or substantially all of its assets or official liquidator is appointed to manage its affairs, pursuant to Law, provided that it shall not constitute a DISCOM Event of Default, where such dissolution or liquidation of DISCOM or DISCOM is for the purpose of a merger, consolidation or reorganization and where the resulting entity has the financial standing to perform its obligations under this Agreement and has creditworthiness similar to DISCOM and expressly assumes all obligations of DISCOM and is in a position to perform them; or;

- (iv) Occurrence of any other event which is specified in this Agreement to be a material breach or default of DISCOM.

13.3 Procedure for cases of RPG Event of Default

13.3.1 Upon the occurrence and continuation of any RPG Event of Default under Article 13.1, DISCOM shall have the right to deliver to the RPG, with a copy to the representative of the lenders to the RPG with whom the RPG has executed the Financing Agreements, a notice stating its intention to terminate this Agreement (DISCOM Preliminary Default Notice), which shall specify in reasonable detail, the circumstances giving rise to the issue of such notice.

13.3.2 Following the issue of a DISCOM Preliminary Default Notice, the Consultation Period of ninety (90) days or such longer period as the Parties may agree, shall apply and it shall be the responsibility of the Parties to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant Event of Default having regard to all the circumstances.

13.3.3 During the Consultation Period, the Parties shall continue to perform their respective obligations under this Agreement.

13.3.4 Within a period of seven (7) days following the expiry of the Consultation Period unless the Parties shall have otherwise agreed to the contrary or the RPG Event of Default giving rise to the Consultation Period shall have ceased to exist or shall have been remedied, DISCOM may terminate this Agreement by giving a written Termination Notice of sixty (60) days to the RPG.

13.3.5 Subject to the terms of this Agreement, upon occurrence of a RPG Event of Default under this Agreement, the lenders in concurrence with the DISCOM, may exercise their rights, if any, under Financing Agreements, to seek substitution of the RPG by a selectee for the residual period of the Agreement, for the purpose of securing the payments of the total debt amount from the RPG and performing the obligations of the RPG. However, in the event the lenders are unable to substitute the defaulting RPG within the stipulated period, DISCOM may terminate the PPA and may acquire the Project assets for an amount equivalent to 90% of the debt due or less as mutually agreed, failing which, the lenders may exercise their mortgage rights and liquidate the Project assets.

Provided that any substitution under this Agreement can only be made with the prior consent of DISCOM including the condition that the selectee meets the eligibility requirements of Request for Selection (RfS) issued by DISCOM and accepts the terms and conditions of this Agreement.

13.3.6 The lenders in concurrence with DISCOM, may seek to exercise right of substitution under Article 13.3.5 by an amendment or novation of the PPA in favour of the selectee. The RPG shall cooperate with DISCOM to carry out such substitution and shall have the duty and obligation to continue to operate the Power Project in accordance with this PPA till such time as the substitution is finalized. In the event of Change in Shareholding/Substitution of Promoters triggered by the Financial Institutions leading to signing of fresh PPA with a new entity, an amount of Rs. 1 Lakh per

MW +18% GST per transaction as facilitation fee (non-refundable) shall be deposited by the RPG to DISCOM.

13.3.7 In the event the lenders are unable to substitute the defaulting RPG within the stipulated period, DISCOM may terminate the PPA and may acquire the Project assets for an amount equivalent to 90% of the debt due, failing which, the lenders may exercise their mortgage rights and liquidate the Project assets.

13.4 Procedure for cases of DISCOM Event of Default

13.4.1 Upon the occurrence and continuation of any DISCOM Event of Default specified in Article 13.2, the RPG shall have the right to deliver to DISCOM, a RPG Preliminary Default Notice, which notice shall specify in reasonable detail the circumstances giving rise to its issue.

13.4.2 Following the issue of a RPG Preliminary Default Notice, the Consultation Period of ninety (90) days or such longer period as the Parties may agree, shall apply and it shall be the responsibility of the Parties to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant Event of Default having regard to all the circumstances.

13.4.3 During the Consultation Period, the Parties shall continue to perform their respective obligations under this Agreement.

13.4.4 After a period of two hundred ten (210) days following the expiry of the Consultation Period and unless the Parties shall have otherwise agreed to the contrary or DISCOM Event of Default giving rise to the Consultation Period shall have ceased to exist or shall have been remedied, DISCOM under intimation to RPG shall, subject to the prior consent of the RPG, novate its part of the PPA to any third party, including its Affiliates within the stipulated period. In the event the aforesaid novation is not acceptable to the RPG, or if no offer of novation is made by DISCOM within the stipulated period, then the RPG may terminate the PPA and at its discretion require DISCOM to either (i) takeover the Project assets by making a payment of the termination compensation equivalent to the amount of the debt due and 150% (one hundred and fifty per cent) of the adjusted equity or, (ii) pay to the RPG, damages, equivalent to 6 (six) months, or balance PPA period whichever is less, of charges for its contracted capacity, with the Project assets being retained by the RPG.

Provided further that at the end of three (3) months period from the period mentioned in this Article 13.4.4, this Agreement may be terminated by the RPG.

13.5 Termination due to Force Majeure

13.5.1 If the Force Majeure Event or its effects continue to be present beyond a period as specified in Article 4.4.2, either Party shall have the right to cause termination of the Agreement. In such an event this Agreement shall terminate on the date of such Termination Notice without any further liability to either Party from the date of such termination.

ARTICLE 14: LIABILITY AND INDEMNIFICATION

14.1 Indemnity

14.1.1 The RPG shall indemnify, defend and hold DISCOM harmless against:

- a) any and all third party claims against DISCOM for any loss of or damage to property of such third party, or death or injury to such third party, arising out of a breach by the RPG of any of its obligations under this Agreement; and
- b) any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest actually suffered or incurred by DISCOM from third party claims arising by reason of a breach by the RPG of any of its obligations under this Agreement, (provided that this Article 14 shall not apply to such breaches by the RPG, for which specific remedies have been provided for under this Agreement).

14.1.2 DISCOM shall indemnify, defend and hold the RPG harmless against:

- a) any and all third party claims against the RPG, for any loss of or damage to property of such third party, or death or injury to such third party, arising out of a breach by DISCOM of any of their obligations under this Agreement; and
- b) any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest ('Indemnifiable Losses') actually suffered or incurred by the RPG from third party claims arising by reason of a breach by DISCOM of any of its obligations.

14.2 Procedure for claiming Indemnity

14.2.1 Third party claims

a. Where the Indemnified Party is entitled to indemnification from the Indemnifying Party pursuant to Article 14.1.1(a) or 14.1.2(a), the Indemnified Party shall promptly notify the Indemnifying Party of such claim referred to in Article 14.1.1(a) or 14.1.2(a) in respect of which it is entitled to be indemnified. Such notice shall be given as soon as reasonably practicable after the Indemnified Party becomes aware of such claim. The Indemnifying Party shall be liable to settle the indemnification claim within thirty (30) days of receipt of the above notice. Provided however that, if:

- i) the Parties choose to refer the dispute before the Arbitrator in accordance with Article 16.3.2; and
- ii) the claim amount is not required to be paid/ deposited to such third party pending the resolution of the Dispute,

the Indemnifying Party shall become liable to pay the claim amount to the Indemnified Party or to the third party, as the case may be, promptly following the resolution of the Dispute, if such Dispute is not settled in favour of the Indemnified Party.

b. The Indemnified Party may contest the claim by referring to the Arbitrator for which it is entitled to be Indemnified under Article 14.1.1(a) or 14.1.2(a) and the Indemnifying Party shall reimburse to the Indemnified Party all reasonable costs and expenses incurred by the Indemnified party. However, such Indemnified Party shall not settle or compromise such claim without first getting the consent of the Indemnifying Party, which consent shall not be unreasonably withheld or delayed.

An Indemnifying Party may, at its own expense, assume control of the defence of any proceedings brought against the Indemnified Party if it acknowledges its obligation to indemnify such Indemnified Party, gives such Indemnified Party prompt notice of its intention to assume control of the defence, and employs an independent legal counsel at its own cost that is reasonably satisfactory to the Indemnified Party.

14.3 Indemnifiable Losses

14.3.1 Where an Indemnified Party is entitled to Indemnifiable Losses from the Indemnifying Party pursuant to Article 14.1.1(b) or 14.1.2(b), the Indemnified Party shall promptly notify the Indemnifying Party of the Indemnifiable Losses actually incurred by the Indemnified Party. The Indemnifiable Losses shall be reimbursed by the Indemnifying Party within thirty (30) days of receipt of the notice seeking Indemnifiable Losses by the Indemnified Party. In case of nonpayment of such losses after a valid notice under this Article 14.3, such event shall constitute a payment default under Article 13.

14.4 Limitation on Liability

14.4.1 Except as expressly provided in this Agreement, neither the RPG nor its/ their respective officers, directors, agents, employees or affiliates (or their officers, directors, agents or employees), shall be liable or responsible to the other Party or its affiliates, officers, directors, agents, employees, successors or permitted assigns or their respective insurers for incidental, indirect or consequential damages, connected with or resulting from performance or non-performance of this Agreement, or anything done in connection herewith, including claims in the nature of lost revenues, income or profits (other than payments expressly required and properly due under this Agreement), any increased expense of, reduction in or loss of power generation or equipment used therefore, irrespective of whether such claims are based upon breach of warranty, tort (including negligence, whether of DISCOM, the RPG or others), strict liability, contract, breach of statutory duty, operation of law or otherwise.

14.4.2 DISCOM shall have no recourse against any officer, director or shareholder of the RPG or any Affiliate of the RPG or any of its officers, directors or shareholders for such claims excluded under this Article. The RPG shall have no recourse against any officer, director or shareholder of DISCOM, or any affiliate of DISCOM or any of its officers, directors or shareholders for such claims excluded under this Article.

14.5 Duty to Mitigate

14.5.1 The Parties shall endeavour to take all reasonable steps so as mitigate any loss or damage which has occurred under this Article 14.

ARTICLE 15: ASSIGNMENTS AND CHARGES

15.1 Assignments

This Agreement shall be binding upon, and inure to the benefit of the Parties and their respective successors and permitted assigns. This Agreement shall not be assigned by any Party, except to the Project Lenders or Lender's Representative as security for their debt under the Financing Agreements, other than by mutual consent between the Parties to be evidenced in writing. Such assignment shall be agreed to by DISCOM subject to the compliance of provisions contained in this Agreement and more specifically to the provisions of Article 4.1.1 of this Agreement. In no case, such assignment shall be permissible prior to the declaration of COD.

Provided that, DISCOM shall permit assignment of any of RPG's rights and obligations under this Agreement in favour of the lenders to the RPG, if required under the Financing Agreements. Provided that, such consent shall not be withheld if DISCOM seeks to transfer to any transferee all of its rights and obligations under this Agreement.

The enforcement of the rights and obligation between the RPG and the DISCOM provided in this Agreement shall not be treated as an assignment but an enforcement of the terms agreed under this Agreement.

Provided further that any successor(s) or permitted assign(s) identified after mutual agreement between the Parties may be required to execute a new agreement on the same terms and conditions as are included in this Agreement. An amount of Rs. 1 Lakh per Transaction as Facilitation Fee (non-refundable) shall be deposited by the RPG to DISCOM. Provided further that, such consent shall not be withheld by the RPG if DISCOM seeks to transfer to any affiliate all of its rights and obligations under this Agreement.

In the event of Change in Shareholding/Substitution of Promoters triggered by the Financial Institutions leading to signing of fresh PPA with a New Entity, an amount of Rs. 1 Lakh per Transaction as Facilitation Fee (non-refundable) shall be deposited by the RPG to DISCOM.

15.2 Permitted Charges

15.2.1 RPG shall not create or permit to subsist any encumbrance over all or any of its rights and benefits under this Agreement, other than as set forth in Article 15.1 and the Guidelines.

ARTICLE 16: GOVERNING LAW AND DISPUTE RESOLUTION

16.1 Governing Law

16.1.1 This Agreement shall be governed by and construed in accordance with the Laws of India. Any legal proceedings in respect of any matters, claims or disputes under this Agreement shall be under the jurisdiction of appropriate courts in_____.

16.2 Amicable Settlement and Dispute Resolution

16.2.1 Amicable Settlement

- i. Either Party is entitled to raise any claim, dispute or difference of whatever nature arising under, out of or in connection with this Agreement ("Dispute") by giving a written notice (Dispute Notice) to the other Party, which shall contain:
 - (a) a description of the Dispute;
 - (b) the grounds for such Dispute; and
 - (c) all written material in support of its claim.
- ii. The other Party shall, within thirty (30) days of issue of Dispute Notice issued under Article 16.2.1(i), furnish:
 - (a) counter-claim and defences, if any, regarding the Dispute; and
 - (b) all written material in support of its defences and counter-claim.
- iii. Within thirty (30) days of issue of Dispute Notice by any Party pursuant to Article 16
 - (i) if the other Party does not furnish any counter claim or defence under Article 16
 - (ii) or thirty (30) days from the date of furnishing counter claims or defence by the other Party, both the Parties to the Dispute shall meet to settle such Dispute amicably. If the Parties fail to resolve the Dispute amicably within thirty (30) days from the later of the dates mentioned in this Article 16.2.1.
 - (iii) the Dispute shall be referred for dispute resolution in accordance with Article 16.3.

16.3 Dispute Resolution

16.3.1 Dispute Resolution by the Appropriate Commission

- i) Where any Dispute or differences arises in relation to this agreement of any nature whatsoever including the construction, interpretation or implementation of the provisions of this agreement as well as claim made by any Party for any change in or determination of the Tariff or any matter related to Tariff or claims made by any Party which partly or wholly relate to any change in the Tariff or determination of any of such claims could result in change in the Tariff, and relates to any matter agreed to be referred to the Appropriate Commission, shall be submitted to adjudication by the Appropriate Commission. Appeal against the decisions of the Appropriate Commission shall be made only as per the provisions of the Electricity Act, 2003, as amended from time to time.
- ii) DISCOM shall be entitled to co-opt the lenders (if any) as a supporting party in such proceedings before the Appropriate Commission.

16.3.2 Dispute Resolution through Arbitration

- i) If the Dispute arising as per Article 16.2.1 is not amicably resolved & such dispute is not covered in Article 16.3.1(i), such Dispute shall be resolved by arbitration under the provisions of the Electricity Act, 2003 (as amended from time to time) as under: Proceedings as well as appointment of the arbitrator(s) shall be carried out by the Appropriate Commissions under the Electricity Act 2003 as amended from time to time. As stipulated by the said Electricity Act

2003, the said arbitration will take place as per the provisions of the Arbitration and Conciliation Act 1996 as amended from time to time.

- ii) ii) The place of arbitration shall be the _____ (City where head quarter of DISCOM is located). The language of the arbitration shall be English.
- iii) The Arbitration Tribunal's award shall be substantiated in writing. The Arbitration Tribunal shall also decide on the costs of the arbitration proceedings and the allocation thereof.
- iv) The provisions of this Article shall survive the termination of this PPA for any reason whatsoever.
- v) The award shall be of majority decision.
- vi) DISCOM shall be entitled to co-opt the lenders (if any) as a supporting party in such arbitration proceedings.

16.4 Parties to Perform Obligations

16.4.1 Notwithstanding the existence of any Dispute and difference referred to the Appropriate Commission and save as the Appropriate Commission may otherwise direct by a final or interim order, the Parties hereto shall continue to perform their respective obligations (which are not in dispute) under this Agreement.

ARTICLE 17: MISCELLANEOUS PROVISIONS

17.1 Amendment

17.1.1 This Agreement may only be amended or supplemented by a written agreement between the Parties.

17.2 Third Party Beneficiaries

17.2.1 This Agreement is solely for the benefit of the Parties and their respective successors and permitted assigns and shall not be construed as creating any duty, standard of care or any liability to, any person not a party to this Agreement.

17.3 Waiver

17.3.1 No waiver by either Party of any default or breach by the other Party in the performance of any of the provisions of this Agreement shall be effective unless in writing duly executed by an authorised representative of such Party.

17.3.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement nor time or other indulgence granted by one Party to the other Parties shall act as a waiver of such breach or acceptance of any variation or the relinquishment of any such right or any other right under this Agreement, which shall remain in full force and effect.

17.4 Confidentiality

17.4.1 The Parties undertake to hold in confidence this Agreement and not to disclose the terms and conditions of the transaction contemplated hereby to third parties, except:

- a) to their professional advisors;
- b) to their officers, contractors, employees, agents or representatives, financiers, who need to have access to such information for the proper performance of their activities; or
- c) disclosures required under Law, without the prior written consent of the other Party.

17.5 Severability

17.5.1 The invalidity or unenforceability, for any reason, of any part of this Agreement shall not prejudice or affect the validity or enforceability of the remainder of this Agreement, unless the part held invalid or unenforceable is fundamental to this Agreement.

17.6 Notices

17.6.1 All notices or other communications which are required to be given under this Agreement shall be in writing and in the English language.

17.6.2 If to the RPG, all notices or other communications which are required must be delivered personally or by registered post or facsimile or any other method duly acknowledged to the addresses below:

Address:

Attention:

Email:

Fax. No. :

Telephone No. :

17.6.3 If to DISCOM, all notices or communications must be delivered personally or by registered post or facsimile or any other mode duly acknowledged to the address(es) below:

Address:

Attention:

Email:

Fax. No. :

Telephone No. :

17.6.4 All notices or communications given by facsimile shall be confirmed by sending a copy of the same via post office in an envelope properly addressed to the appropriate Party for delivery by registered mail. All notices shall be deemed validly delivered upon receipt evidenced by an acknowledgement of the recipient, unless the Party delivering the notice can prove in case of delivery through the registered post that the recipient refused to acknowledge the receipt of the notice despite efforts of the postal authorities.

17.6.5 Any Party may by notice of at least fifteen (15) days to the other Party change the address and/or addresses to which such notices and communications to it are to be delivered or mailed.

17.7 Language

17.7.1 All agreements, correspondence and communications between the Parties relating to this Agreement and all other documentation to be prepared and supplied under the Agreement shall be written in English, and the Agreement shall be construed and interpreted in accordance with English language.

17.7.2 If any of the agreements, correspondence, communications or documents are prepared in any language other than English, the English translation of such agreements, correspondence, communications or documents shall prevail in matters of interpretation.

17.8 Restriction of Shareholders / Owners' Liability

17.8.1 Parties expressly agree and acknowledge that none of the shareholders of the Parties hereto shall be liable to the other Parties for any of the contractual obligations of the concerned Party under this Agreement. Further, the financial liabilities of the shareholder/s of each Party to this Agreement, shall be restricted to the extent provided in the Indian Companies Act, 2013.

17.9 Taxes and Duties

17.9.1 The RPG shall bear and promptly pay all statutory taxes, duties, levies and cess, assessed/levied on the RPG, contractors or their employees that are required to be paid by the RPG as per the Law in relation to the execution of the Agreement and for supplying power as per the terms of this Agreement.

17.9.2 DISCOM shall be indemnified and held harmless by the RPG against any claims that may be made against DISCOM in relation to the matters set out in Article 17.9.1.

17.9.3 DISCOM shall not be liable for any payment of, taxes, duties, levies, cess whatsoever for discharging any obligation of the RPG by DISCOM on behalf of RPG.

17.10 Independent Entity

17.10.1 The RPG shall be an independent entity performing its obligations pursuant to the Agreement.

17.10.2 Subject to the provisions of the Agreement, the RPG shall be solely responsible for the manner in which its obligations under this Agreement are to be performed. All employees and representatives of the RPG or contractors engaged by the RPG in connection with the performance of the Agreement shall be under the complete control of the RPG and shall not be deemed to be employees, representatives, contractors of DISCOM and nothing contained in the Agreement or in any agreement or contract awarded by the RPG shall be construed to create any contractual relationship between any such employees, representatives or contractors and DISCOM.

17.11 Compliance with Law

Despite anything contained in this Agreement but without prejudice to this Article, if any provision of this Agreement shall be in deviation or inconsistent with or repugnant to the provisions contained in the Electricity Act, 2003, or any rules and regulations made there under, such provision of this Agreement shall be deemed to be amended to the extent required to bring it into compliance with the aforesaid relevant provisions as amended from time to time.

17.12 Breach of Obligations

The Parties acknowledge that a breach of any of the obligations contained herein would result in injuries. The Parties further acknowledge that the amount of the liquidated damages or the method of calculating the liquidated damages specified in this Agreement is a genuine and reasonable pre-estimate of the damages that may be suffered by the non-defaulting party in each case specified under this Agreement.

IN WITNESS WHEREOF the Parties have caused the Agreement to be executed through their duly authorized representatives as of the date and place set forth above.

For and on behalf of
[DISCOM]

For and on behalf of [RPG]

Name, Designation and Address

Name, Designation and Address

Signature with seal

Signature with seal

Witness:

Witness:

- 1.
- 2.

- 1.
- 2.

Annexure-III

Guidelines for Installation of Innovative Stand-alone Solar Pumps

These guidelines are applicable for all Indian innovators/manufacturers/service providers, who wish to install innovative stand-alone solar pumps in the country under Schemes operated by the MNRE.

I. Call of Expression of Interest (EoI)

- a) The Ministry will call EoI from time to time for inviting application from solar pump innovators claiming better performance on account of improved efficiency, cost effectiveness, monitoring, other value addition, etc. Only those innovative products which are available for testing and field trial will be eligible for participation in the EoI.
- b) New technologies for which patent/IP related filings have been done (patent may not have been awarded) will also be eligible to participate in the EoI. Organization which has filed the patent should be the sole applicant or lead partner in case of a consortium/JV.
- c) The elements of innovation in the context of improved performance of solar pump needs to be mentioned very clearly by the applicants in their response to EoI. A cost benefit analysis shall also be enclosed with the proposal.

II. Evaluation of Applications

Applications will be evaluated by an Evaluation Committee constituted by MNRE having technical and financial experts of the sector including academic experts. Test report for the proposed solar pump will be submitted by the innovator along with EoI, however, if deemed necessary, the Committee may recommend re-testing of performance of the pump at NISE or any other NABL accredited lab before allowing installation of such pumps in the field. In cases, where the technology is in its nascent stage, special method may be adopted to test the pumps in consultation with the innovator and NISE. The expenditure incurred on testing will be borne by the applicant.

III. Demonstration of the Innovation

a) On recommendations of the Committee, the innovative technology will be allowed for demonstration in the field after getting consent from respective state implementing agency (SIA) and the beneficiary farmers by the innovator. The innovator will be allowed to install up to 50 solar pumps in different parts of the State/UT for demonstration purpose.

b) For payment (subsidy and beneficiary share), AMC, performance guarantee, etc., the innovators will be treated at par with other vendors selected through competitive bidding process and awarded work for installation of solar water pumps in the respective state/UT and the innovators will not get any additional cost over and above the cost discovered through tendering process. Further, the innovators is required to deposit bank guarantee equivalent to payment made to him against the installation of solar pump, which will be encashed, if the pump is failed to meet at least the existing MNRE performance standards during demonstration period of one year. In addition, the innovators have to fill-up indemnity bond against damages caused to farmer due to under performance of pump during the period of demonstration. On successful trail of pump, the indemnity bond and bank guarantee would be released, however, the performance guarantee as applicable during the period of AMC will be retained by the SIA.

c) The field demonstration will continue for at least one year from date of installation of such pumps and during that period the performance of the pump will be monitored on real time basis. Access to remote monitoring facility for the installed pumps shall be provided to NISE so that field data may be accumulated and evaluated.

d) Innovator will submit on monthly basis a detailed performance report of the pump including a comparative analysis with similar capacity pump specified by the MNRE, along with feedback from SIA & beneficiary farmers to the Evaluation Committee. MNRE/NISE will also conduct field inspection to check the performance as and when required.

e) Installed innovative pumps shall meet at least the existing MNRE performance standards. However, only the innovations showing substantial improvement from the MNRE specifications may be considered for adoption. A comparative analysis of performance of innovative technology vis-à-vis MNRE specifications will also be done by the Evaluation Committee.

f) After detailed examination and deliberations, the Evaluation Committee may recommend for adoption of specifications of innovative pump, with certain modifications, if required.

IV. Adoption of technology by MNRE

On recommendations of the Evaluation Committee, the MNRE may adopt the innovative technology and update the existing specification after having detailed stakeholders' consultation on the same. For innovations with outstanding performance the innovators will get certificate of appreciation from MNRE.