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Government of India
Ministry of New and Renewable Energy

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Lodhi Road, New Delhi
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Office Memorandum

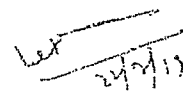
Subject: Guidelines for implementation of Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhayan Scheme.

This refers Ministry's OM of even number dated 8.3.2019 vide which sanction was issued for launch of New Scheme for Farmers covering following three Components:

- i. Component A. 10,000 MW of Decentralized Ground Mounted Grid Connected Renewable Power Plants of individual plant size up to 2 MW.
 - ii. Component B. Installation of 17.50 lakh standalone Solar Powered Agriculture Pumps of individual pump capacity up to 7.5 HP.
 - iii. Component C. Solarisation of 10 Lakh Grid-connected Agriculture Pumps of individual pump capacity up to 7.5 HP.
2. The Scheme will be called as Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhayan (PM KUSUM) Scheme. The operational Guidelines for implementation of the PM KUSUM Scheme are enclosed.
3. This issues with the approval of Competent Authority.

Enclosed: As above.

To
All Concern


(J.K. Jethani)
Scientist-F

Ministry of New and Renewable Energy

**Guidelines for Implementation of Pradhan Mantri Kisan Urja Suraksha evam Utthan
Mahabhiyan (PM KUSUM) Scheme**

1. Background

As a part of Intended Nationally Determined Contributions (INDCs), India has committed to increase the share of installed capacity of electric power from non-fossil-fuel sources to 40% by 2030.

The Cabinet had approved scaling-up of solar power target from 20,000 MW of Grid Connected Solar power Projects to 1,00,000 MW by 2022.

While Large Scale Solar power generation projects are being installed to achieve the ambitious target of 100 GW of Solar Power generation by 2022, it has been planned to simultaneously develop decentralized Solar energy and other renewable energy generation Plants of capacity up to 2 MW which could be connected directly to existing 33/11 kV or 66/11 kV or 110/11 kV sub-stations of Distribution Company, thus saving in transmission system requirement apart from T&D losses. Such plants near these sub-stations may be developed, preferably by farmers, giving them an opportunity to increase their income by utilising their barren and uncultivable land for solar or other renewable energy based power plants. Cultivable land may also be used if the Solar plants are set up on stilts where crops can be grown below the stilts and sell RE power to DISCOMs.

Besides, developing decentralized renewable power, it is planned to replace Agriculture Diesel pumps with Solar Water pumps and Solarise Grid connected Agriculture pumps. At present, over 30 million agricultural pumps are installed in India, out of which nearly 10 million pumps are diesel based. The Distribution Companies (DISCOMs) are not in a position to energize these pumps through grid connection as seen from the long waiting lists with such Distribution Companies. Hence there is a need to provide energy to these pumps through solar energy. Also, over 20 million grid-connected agriculture water pumps installed in the country consume more than 17 percent of total annual electricity consumption of the country. Solarization of the same can reduce dependence of these pumps on conventional sources of energy supplied by DISCOMs and thus reducing their burden of subsidy on agriculture consumption of Electricity. This will also provide additional source of income to farmers who will be in a position to sell the surplus power to DISCOMs.

The new Scheme has provision for the decentralised renewable energy plants, Solar agriculture water pumps and solarisation of existing Grid connected Agriculture pumps.

2. Approval of the New Scheme for Farmers

The Government of India has launched New Scheme for Farmers 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 17.50 Lakh Stand-alone Solar Agriculture Pumps; and

iii. Component-C: Solarisation of 10 Lakh Grid Connected Agriculture Pumps.

The Component-A and Component-C will be implemented initially on pilot mode for 1000 MW capacity and one lakh grid connected agriculture pumps respectively and Component-B will be implemented in full-fledged manner with total Central Government support of Rs. 19,036.5 Crore.

After successful implementation of pilot project of Components A and C, the same shall be scaled up with necessary modifications based on the learning from the pilot phase with total Central Government support of ₹ 15,385.5 Crores.

All three components of the scheme aim to add Solar capacity of 25,750 MW by 2022 with the total Central Financial Support of ₹ 34,422 crore.

3. Implementation mechanism:

These guidelines have been formulated to provide broad implementation framework of the Scheme.

I. Component A: Setting up of 10,000 MW of Decentralized Ground/Stilt Mounted Grid Connected Solar or other Renewable Energy based Power Plants

Under this component, solar or other renewable energy based power plants (REPP) of capacity 500 kW to 2 MW will be setup by individual farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations (FPO)/Water User associations (WUA) hereinafter called Renewable Power Generator (RPG). However, States/DISCOMs may allow setting-up of solar or other renewable energy based power plants of capacity less than 500 kW in specific cases. 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.

The Distribution companies (DISCOMs) will notify sub-station wise surplus capacity which can be fed from such RE power plants to the Grid and shall invite applications from interested beneficiaries for setting up the renewable energy plants. The renewable power generated will be purchased by DISCOMs at a pre-fixed levelised tariff. 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 levelised tariff will be the ceiling tariff for bidding. 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 as the case may be. A model PPA (Power Purchase Agreement) to be executed between RPG and DISCOMs has been prepared by MNRE and attached at Annexure-I. The duration of PPA will be 25 years from Commercial Operation Date (COD) of the project. The total energy purchased from these RE plants will be accounted for fulfillment of RPO by the DISCOM.

In case the farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations (FPO)/ Water User associations (WUA) etc. are not able to arrange equity required for setting up the REPP, they can opt for developing the REPP through developer(s) or even through local DISCOM, which will 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 has been prepared by MNRE and is attached at Annexure-II. However, the terms of Land Lease Agreement may be finalised on mutual consent of concerned parties.

The REPP under the scheme would be implemented primarily on Barren / uncultivable land. Agricultural land is also permitted under the scheme provided that solar plants are installed in stilt fashion (i.e. raised structure for installation of Solar panels) and with adequate spacing between panel rows for ensuring that farming activity is not affected. The RPG would be free to adopt any renewable energy source or technology while responding to the bid. However, in case of cultivable land with solar plants, the same may be installed on stilts, so that the farmers continue to cultivate the land, apart from getting the benefit of lease rent. In such a case DISCOM may also float bids (in case of specific substations) where setting up of solar projects on stilts may be mandatorily required, and bids for energy tariff invited accordingly.

A. Selection and Implementation of Decentralised Renewable Energy Power Plants

a. Notification of sub-station wise generation capacity

DISCOM shall assess and notify RE generation capacity that can be injected in to all 33/11 kV or 66/11 kV or 110/11 kV sub-station of rural areas and place such notification on its website for information of all stakeholders. To facilitate farmers willing to lease out their land for development of RE plants near above notified substation(s), as per provisions of this scheme, DISCOM may also place list of such farmers on their website. However, the leasing of land of any farmers will be a bi-partite agreement between the farmer and the developer and DISCOM will not be held responsible for failure in getting the land leased out to a developer. To meet additional demand DISCOM will augment the capacity of sub-station under IPDS or any other scheme.

b. Expression of Interest (EoI) for Short-listing of RPG

DISCOM or any agency authorized by the DISCOM shall invite 33/11 kV or 66/11 kV or 110/11 kV sub-station wise EoI from RPG to participate in selection process for development of decentralised renewable power plants. The RPG shall submit their interest against the EoI as per the schedule notified by DISCOM. An RPG will not be allowed to apply for more than one renewable power plant for a particular 33/11 kV sub-station. The EoI of an RPG will also be disqualified if it is found that its proprietor/partner/director/member has also filed EoI as proprietor/partner/director_/member for another RPG for the same sub-station.

The DISCOM or any agency authorized by the DISCOM may request to submit 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.

In order to ensure only quality systems are installed, prevailing MNRE/BIS specifications and quality control orders applicable for solar modules, inverters, BoS and other equipment shall be followed.

In case of REPP being developed by a developer, the Net-Worth of the developer should not be less than Rs. 1.00 Crore per MW (of the capacity applied). This shall not be applicable for

farmers cooperative or panchayats or Farmer Producer Organisations (FPO) /Water User associations (WUA) or farmers setting up REPP in their own lands.

c. Selection of REPP

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, LoA will be awarded to all eligible applicants for procurement of renewable power at a pre-fixed levelised tariff.

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. 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 or e-reverse auction as the case may be. LoA will be awarded to all successful bidders.

d. Connectivity with the sub-station

REPP of capacity up to 2 MW may be connected at 11 kV side of sub-station and the selected RPG will be responsible for laying of dedicated 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. The DISCOM will facilitate the RPG in getting right of way for laying of 11 kV line. Alternatively, RPG can get constructed the 11 kV lines through DISCOM by paying the applicable cost and other charges. RPG will be responsible for maintaining this dedicated 11 kV line. In case more than one bidders 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. However, in North Eastern States, Sikkim, Jammu & Kashmir, Himachal Pradesh and Uttarakhand, Lakshadweep and A&N Islands, where States/UTs allows RE plants of capacity less than 500 kW the plant may be connected through LT line subject to technical feasibility and approval by DISCOM.

The RPG shall comply grid connectivity and other regulations as applicable.

e. 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.

f. Power Purchase Agreement (PPA)

A copy of standard Power Purchase Agreement to be executed between the DISCOM and the RPG shall be provided by DISCOM along with invitation for submission of EoI. The model PPA agreement shall be as provided by MNRE (Copy enclosed). Within two months of the date of issue of Letter of Award (LoA) by DISCOM or any agency authorized by the DISCOM, the Power Purchase Agreement (PPA) will have to be executed by RPG. The PPA shall be for a period of 25 years from the date of COD. The DISCOM will be obliged to buy the entire power from RPG within the contract capacity. However, the RPG is required to achieve a minimum CUF of 15% on annual basis during the PPA period. However, in case of low Solar radiation zones, minimum CUF can be revised by concerned DISCOM. 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. However, any extension of the PPA period beyond 25 years shall be through mutual agreements between the RPG and DISCOM. As a payment security measure DISCOM will have to maintain LC and Escrow Arrangement as defined in the PPA.

g. Bank Guarantees

The RPG shall provide the following Bank Guarantees to DISCOM as follows:

- Earnest Money Deposit (EMD) of Rs. 1 Lakh/MW in the form of Bank Guarantee along with EoI.
- Performance Bank Guarantee (PBG) of Rs. 5 Lakh/MW within 30 days from date of issue of Letter of Award.

The Bank Guarantees against EMD shall be returned to the selected RPG on submission of valid PBGs. The selected RPGs are required to sign PPA with the DISCOM in line with the timeline given in the Guidelines. In case, the selected RPG fails to execute the PPA within the stipulated time period, the Bank Guarantee equivalent to EMD shall be en-cashed by DISCOM as penalty. 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). The PBGs shall be valid for a period of 12 months from the date of issue of LoA for the REPP. The PBG will be returned to the RPG immediately after successful commissioning of solar power plant, after taking into account any penalties due to delay in commissioning as per provisions stipulated in the Guidelines.

h. Commissioning

The selected RPG shall commission the solar power plant within nine months from date of issuance of LoA. The RPG may commission the REPP during this period of nine months and the DISCOM is obliged to purchase power from that commissioned REPP any time after the issuance of LoA. 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. 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 two 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 two months, the PPA capacity shall stand reduced / amended to the Project capacity commissioned at the end of 11th month from date of issuance of Letter of Award.

In case of delays of plant commissioning due to the reasons beyond the control of the RPG, DISCOM after having been 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.

i. Shortfall in minimum generation

During PPA, if for any year, it is found that the RPG has not been able to generate minimum energy corresponding to CUF of 15% or as prescribed by DISCOMs; such shortfall in performance shall make RPG liable to pay the compensation as provided in the PPA to the DISCOM. This will, however be relaxable to the extent of grid non-availability for evacuation, which is beyond the control of the RPG. Further, this compensation shall not be applicable in

events of Force Majeure identified under PPA with Discom affecting supply of solar power by RPG.

j. Commercial Operation Date (COD)

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.

k. Release of PBI to DISCOM

DISCOM would be eligible to get 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. However, to avail the PBI, DISCOM shall submit following documents after completion of one year from the COD and every year thereafter till five years:

- Timely payment of monthly lease rent, if applicable, to the land owner of the project.
- Monthly units purchased from the plant and corresponding payment made to the project developer.

Applicable PBI would be released to the DISCOM after submission of these documents by DISCOM to MNRE.

B. Roles and responsibilities of stakeholders:

(i) Ministry of New and Renewable Energy:

MNRE shall allocate initial capacity of 1000 MW for Pilot Project to DISCOMs based on their demand and readiness for implementation. Pilot projects will be continuously monitored during implementation and also on completion to evaluate their success and a detailed report will be prepared for recommending further scaling up of the capacity under this component. Such evaluation may be done internally or through external agency as per decision of the MNRE.

Ministry will issue Model PPA and model Lease Agreement for implementation of the scheme.

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. The PBI will be given to the DISCOMs for a period of five years from the Commercial Operation Date of the plant. Therefore, the total PBI that shall be payable to DISCOMs will be Rs. 33 Lakh per MW.

(ii) DISCOMs:

The DISCOMs shall have to send their demand for sanction under the scheme along with details on their readiness to implement the component A of the scheme.

The concerned DISCOM shall declare the renewable power capacity that can be connected to a 33/11 kV sub-station and carry-out the procedure for selection of RPG. On selection of RPG, DISCOMs shall issue the LoA and sign PPA with RPG. DISCOMs will provide connectivity at the sub-station to the selected RPG. 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. They shall act as facilitator to the beneficiaries in implementation of this scheme.

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.

(iii) State Nodal Agency (SNA):

State Nodal Agency (SNA) will coordinate with States/UTs, DISCOMs and farmers for implementation of the scheme. They will assist the farmers in project development activities including formulation of DPR, PPA/EPC contracts, getting funds from financial institutions, etc. For settlement of any issues arising during selection of solar/ other renewable energy based power plants and their implementation, a State level Committee under the chairmanship of Principal Secretary (Renewable Energy/Energy) will be setup by the participating State/UT and SNA of that State will be responsible to coordinate/organize the quarterly meetings of the State Level Committee. In addition, SNAs shall ensure publicity of the scheme and create awareness through advertisements etc, and also monitor the implementation of the scheme. The SNA will be eligible to get service charge of Rs.0.25 Lakh per MW after commissioning of the projects.

(iv) Renewable Power Generator (RPG):

Individual farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations (FPO)/Water User associations (WUA) or projects developer would be the RPG. They have to participate in the selection process to be carried out by DISCOMS. In case of selection, they have to sign PPA and install the plant as per provisions of these guidelines and applicable rules and regulations.

II. Component B: Installation of 17.50 Lakh Stand-alone Solar Pumps

Under this Component, individual farmers will be supported to install standalone solar Agriculture pumps of capacity up to 7.5 HP for replacement of existing diesel Agriculture pumps / irrigation systems in off-grid areas, where grid supply is not available. Installation of new pumps shall also be permitted under this scheme except in dark zone areas. Pumps of capacity higher than 7.5 HP may be allowed, however, the CFA will be limited to the CFA applicable for pump of 7.5 HP. Water User Associations and community/cluster based irrigation system will also be covered under this component. However, priority would be given to small and marginal farmers. 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.

Solar PV capacity in kW for the pump capacity in HP will be allowed as per MNRE specifications under the scheme 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.

CFA of 30% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar Agriculture pump will be provided. The State Government will give a subsidy of 30%; and the remaining 40% will be provided by the farmer. Bank finance may be made available for farmer's contribution, so that farmer has to initially pay only 10% of the cost and remaining up to 30% of the cost as loan. In case the State Government provides subsidy more than 30%, the beneficiary share will reduce accordingly.

However, in North Eastern States, Sikkim, Jammu & Kashmir, Himachal Pradesh and Uttarakhand, Lakshadweep and A&N Islands, CFA of 50% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar pump will be provided. The State Government will give a subsidy of 30%; and the remaining 20% will be provided by the farmer. Bank finance may be made available for farmer's contribution, so that farmer has to initially pay only 10% of the cost and remaining up to 10% of the cost as loan. In case the State Government provides subsidy more than 30%, the beneficiary share will reduce accordingly.

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.

Possibilities would be explored by implementing agencies 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 in coordination with respective Ministries/Departments.

Further, whenever the grid reaches in the off-grid area, the stand alone Solar Agriculture Pumps can be connected to the grid to feed surplus power depending on grid capacity. DISCOMs may purchase this surplus power from the farmer at the rate decided by the respective State/SERC.

DISCOMs/ Agricultural Department/ Minor Irrigation Department / any other Department designated by State Government will be the implementing agencies for this component. 2% of the eligible CFA will be provided as service charges in totality to all the agencies involved in implementation including the designated State Implementing Agency. Part of service charges (to be decided by MNRE) shall be given to the central agency for centralised tendering. Additionally, some part of the service charge may also be retained by MNRE for nation-wide centralized IEC activities.

a. Allocation and procurement of pumps

State-wise allocation of solar pumps will be issued by MNRE once in a year or as and when required, after approval by a Screening Committee under the chairmanship of Secretary, MNRE. Much before the start of every financial year during the Scheme tenure, MNRE will call for submission of demand from the implementation agencies. Based on overall target for the year and the demand received from implementation agencies, MNRE will allocate quantity of pumps to the implementation agencies in the States. On acceptance of the allocated quantity by the implementation agencies and submission of detailed proposal as per MNRE format, within a given time period, final sanction will be issued by MNRE. MNRE will have the discretion to amend the sanction any time of the year after ascertaining the pace of progress in any particular state, or as per requirements of the scheme.

Implementing agencies will submit proposals through online portal to MNRE for approval. Offline proposals will not be accepted, unless MNRE has given a general exemption from the requirement of online submission to any agency for any specific period of time.

Proposals for new installations will only be considered by the Screening Committee. Proposals wherein the systems have already been installed/ under installation will not be considered for approval under the Programme by the Screening Committee.

There will be centralized tendering of solar water pumping system through Central PSUs. These CPSUs will carry out tendering process as per Guidelines and standards & specifications issued by MNRE. Any deviation shall normally be not permissible except in specific cases with the approval of Secretary, MNRE.

For centralized tendering the designated CPSUs may come out region-wise/State-wise tenders, however, their role will be limited to selection of bidders and discovery of rates. To ensure quality and post installation services only manufacturers of solar water pumps or controllers or manufacturers of solar panels would be allowed to participate in the bidding process. Normally, three bidders would be selected and they have to match L1 rates and the quantity allocated to those who agree to match the L1 rates them would be 50%, 30%, and 20% of the total tender quantity respectively in the ascending order of rates quoted by them. Number of bidders selected may vary depending upon the tender quantity. The selection of beneficiaries and implementation of scheme would be the responsibility of the State Implementation Agency. Cluster based approach would be used for allocation of districts to the selected bidders to optimize the resources and ensure quality services made available to the farmer. As far as possible contiguous districts would be allotted to the successful bidders, with the total requirements of pumps in the allocated area matching the quantity allotted to them.

Installation of 17.5 lakh Stand-alone Solar Water Agriculture Pumping Systems will create solar PV capacity of over 8000 MW. Since pumps are generally used for 150 days in a year, this capacity can be optimally utilized by using Universal Solar Pump Controller (USPC), through which farmer can use solar power for other activities like operating chaff cutter, floor mill, cold storage, drier, battery charges, etc., and increase his income. Option would be given to the farmer to opt for USPC and additional cost of solar PV pumping system with USPC would be discovered by the tendering agency. The entire additional cost for solar pumping system with USPC would be borne by the farmer. States/UTs may bear this additional cost to facilitate use of solar energy for other activities and increasing the income of farmers.

In all cases, the successful bidder shall provide AMC for five years from the date of installation, real time monitoring, helpline, district level service centres and comply standards of performance in dealing with complaints/redressal mechanism.

The Implementation Agency would also be responsible for carrying out publicity of the scheme so as to increase awareness amongst potential beneficiaries. For this purpose, apart from their own publicity content, they shall also be guided by advice of MNRE on this matter.

b. Installation timeline and Penalties

Projects for installation of solar Agriculture pumps systems shall be completed within 12 months from the date of sanction by MNRE. However, for North Eastern States including Sikkim, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Lakshadweep and A&N Islands

this time limit will be 15 months from the date of sanction. 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 upto 6 months at the level of Secretary in MNRE on submission of valid reasons by the implementing agency. However, such extension will attract reduction in service charges to implementing agency as under:

- a. 10% reduction in applicable service charges for delay of more than one month in completion of project.
- b. Further reduction of 10% of service charges for delay of more than two month and up to three months.
- c. Further reduction of 10% of service charges for delay of more than three month and up to six months
- d. No service charges for delay in completion of more than six months.

No extension will be granted beyond six months and only the systems which are installed in all respects and commissioned within stipulated time period will be considered for release of CFA.

c. Release of funds

Funds up to 40% of the applicable CFA for the sanctioned quantity would be released as advance to the implementing agency only after placement of letter of award(s) to the selected vendors. The implementing agencies may pass on this fund to the selected vendors in different stages on achievement of various milestones as per terms and conditions of letter of award(s). Second installment up to 30% of the applicable CFA would be released on submission of UCs and SoE for the first release. The balance eligible CFA 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.

d. Monitoring and maintenance

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. 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 and a helpline in local language in each operational State. Helpline number shall be indicated on the pump/ controller at suitable location easily visible to the user.

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.

Monitoring of the Scheme and its implementation will be carried out during the period of implementation of the Scheme as is given below:

- i. The implementing agency would be responsible for monitoring parameters such as end-use verification and compilation of statistical information.

- ii. Implementing agencies will submit monthly progress report for the sanctioned projects.
- iii. Funds may be released by implementing agency to the vendor on submission of bank guarantee equivalent to 10% of the cost of systems installed 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.
- iv. The Ministry officials or designated agency may inspect the ongoing installation or installed plants. In case the installed systems are not as per standards, non-functional on account of poor quality of installation, or non-compliance of AMC, the Ministry reserves the right to blacklist the vendor. Blacklisting may inter-alia include the following:
 - a. The Vendor/Firm will not be eligible to participate in tenders for Government supported projects.
 - b. In case, the concerned Director(s) of the firm/company joins another existing or starts/ joins a new firm/company, the company will automatically be blacklisted.

e. Responsibilities of Implementation Agency

The Implementing Agencies will be responsible for the following activities:

- i. Demand aggregation for solar Agriculture pumps through online portal.
- ii. Prepare proposal and submit to MNRE for sanction
- iii. Oversee installation of systems.
- iv. Inspection of installed systems and online submission of completion reports to MNRE.
- v. Submission of utilization certificates and audited statement of expenditure through EAT module and disbursement of MNRE CFA.
- vi. Online submission of monthly and quarterly progress reports.
- vii. Ensure project completion within the given timelines and compliance of MNRE Guidelines and Standards.
- viii. Online and offline maintenance for records.
- ix. Real time monitoring through dedicated web-portal
- x. Performance monitoring of installed system through third party
- xi. Ensure compliance of AMC and training of locals by the vendors.
- xii. Carrying out publicity of the scheme so as to increase awareness, for which purpose advice of MNRE may also be adopted apart from its own publicity.
- xiii. Any other activity to ensure successful implementation of the programme.

III. Component C: Solarisation of 10 Lakh Grid Connected Agriculture Pumps

Under this Component, individual farmers having grid connected agriculture pump will be supported to solarise pumps. Solar PV capacity up to two times of pump capacity in kW is allowed under the scheme. However, State may specify lower solar PV capacity in kW, which

in any case shall be not be less than pump capacity in HP e.g. for 2 HP pump it will not be less than 2 kW. The farmer will be able to use the generated solar power to meet the irrigation needs and the excess solar power will be sold to DISCOMs. Water User Associations and community/cluster based irrigation system will also be covered under this component. However, priority would be given to small and marginal farmers. 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.

Possibilities would be explored by implementing agencies 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 in coordination with respective Ministries/Departments.

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

CFA of 30% of the benchmark cost or the tender cost, whichever is lower, of the solar PV component will be provided. The State Government will give a subsidy of 30%; and the remaining 40% will be provided by the farmer. Bank finance may be made available for farmer's contribution, so that farmer has to initially pay only 10% of the cost and remaining up to 30% of the cost as loan. In case the State Government provides subsidy more than 30%, the beneficiary share will reduce accordingly.

However, in North Eastern States, Sikkim, Jammu & Kashmir, Himachal Pradesh and Uttarakhand, Lakshadweep and A&N Islands, CFA of 50% of the benchmark cost or the tender cost, whichever is lower, of the solar PV component will be provided. The State Government will give a subsidy of 30%; and the remaining 20% will be provided by the farmer. Bank finance may be made available for farmer's contribution, so that farmer has to initially pay only 10% of the cost and remaining up to 10% of the cost as loan. In case the State Government provides subsidy more than 30%, the beneficiary share will reduce accordingly.

Further, 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 may be allowed, however, the CFA will be limited to the CFA applicable for pump of 7.5 HP in the respective State/UTs. This will help to create an avenue for extra income to the farmers, and for the DISCOMs to meet their RPO targets. The solar power fed in to the grid and solar power utilized by farmer both will be accounted for fulfillment of solar RPO by the DISCOM.

DISCOM may adopt any of the modalities for solarisation of pumps viz, (i) Net-metering: 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; (ii) Pump to run on solar power only: in this case the pump will run from the solar power as in case of stand-alone solar pump and no power will be drawn from the grid for operation of pump. In case solar power generation is higher than required by pump, the additional solar power would be fed to the grid.

DISCOMs /GENCO/ any other Department designated by State Government will be the implementing agencies. 2% of the eligible CFA will be provided as total service charges to all agencies implementing the scheme including the designated State Implementing Agencies. In case of centralised tendering, some percentage/fixed amount out of service charges (to be decided by MNRE) shall be given to the central agency. MNRE may also retain a certain amount from service charge for nation-wide centralised IEC activities.

This component will be applicable to farmers already connected to grid. Feeder-wise implementation is proposed to be carried out. All agriculture pumps in a feeder will be solarised, however, States may impose a minimum solarisation requirement for a feeder in terms of minimum % of pumps solarized on that feeder.

In case of dark zones/black zones only existing grid connected pumps will be solarized provided they use micro irrigation techniques to save water.

Possibilities would be explored by implementing agencies 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 in coordination with respective Ministries/Departments.

DISCOMs will purchase excess power from the farmer at the rate decided by the respective State/SERC. The DISCOMs will ensure "must-run" status to the solarised feeders and will keep such feeders 'ON' during sunshine hours of a day.

It will be mandatory for implementing agency to create remote monitoring system to monitor performance of the system post-installation.

States may also formulate state specific policy for grid connected solar pumps, customised to needs of the respective State, keeping the broad framework provided by MNRE intact.

a. Allocation of solarisation capacity and procurement

State-wise allocation for solarisation of pumps will be issued by MNRE once in a year, after approval by a Screening Committee under the chairmanship of Secretary, MNRE. In the beginning of every financial year during the Scheme tenure, MNRE will call for submission of feeder-wise demand for solarization. Based on overall target for the year and the demand received from implementation agencies, MNRE will allocate solarization capacity to the implementation agencies in the States. On acceptance of the allocated quantity by the implementation agencies and submission of detailed proposal as per MNRE format, with in a given time, final sanction will be issued by MNRE.

As per approval, the component is to be implemented on pilot mode for initial one lakh grid connected agriculture pumps and accordingly, initially this capacity will be allocated by MNRE to implementing agencies based on their demand and readiness for implementation of the component. Pilot projects will be continuously monitored during implementation and also on completion to evaluate the success of pilot run and a detailed report will be prepared for recommending further scaling up of the capacity under this component. Such evaluation may be done internally or through external agency as per decision of the MNRE.

Implementing agencies will submit proposals through online portal to MNRE for approval. Offline proposals will not be accepted, unless MNRE has given a general exemption from the requirement of online submission for any specific period of time.

Proposals for new installations will only be considered by the Screening Committee. Proposals wherein the pumps are already solarized prior to sanction of MNRE will not be considered for approval under the Scheme by the Screening Committee.

MNRE may specify either a centralized tendering of solarisation system through Central PSUs or by the State Implementation Agencies. These CPSUs or State Implementation agencies will carry out tendering process as per the Guidelines, standards and specifications issued by MNRE. Any deviation shall normally be not permissible except in specific cases with the approval of Secretary, MNRE

In case of centralized procurement the designated CPSUs may come out with region-wise/State-wise tenders, however, their role will be limited to selection of bidders. The selection of beneficiaries and implementation of scheme would be the responsibility of the State Implementation Agency.

In all cases, the bids shall require the successful bidder to provide for AMC for five years from the date of installation, helpline, district level service centres and comply standards of performance in dealing with complaints.

The Implementation Agency would also be responsible for carrying out publicity of the scheme so as to increase awareness amongst potential beneficiaries. For this purpose, apart from their own publicity content, they shall also be guided by advice of MNRE on this matter.

b. Installation timeline and Penalties

Projects for solarisation of pumping systems shall be completed within 12 months from the date of sanction by MNRE. However, for North Eastern States including Sikkim, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Lakshadweep and A&N Islands this time limit will be 15 months from the date of sanction. 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 upto 6 months at the level of Secretary in MNRE on submission of valid reasons by the implementing agency. However, such extension will attract reduction in service charges to implementing agency as under:

- a. 10% reduction in applicable service charges for delay of more than one month in completion of project.
- b. Further reduction of 10% of service charges for delay of more than two month and up to three months.
- c. Further reduction of 10% of service charges for delay of more than three month and up to six months
- d. No service charges for delay in completion of more than six months.

No extension will be granted beyond six months and only the systems which are installed in all respects and commissioned within stipulated time period will be considered for release of CFA.

The implementing agencies after submitting proposal to MNRE may choose to start the preparatory activities including tendering process. However, the Letter of Award/Purchase Order shall be placed to the selected vendor(s) only after the issue of sanction letter by MNRE. Further, MNRE will not be responsible for any liabilities arising out of a situation where the proposal is eventually rejected.

c. Release of funds

Funds up to 40% of the applicable CFA for the sanctioned quantity would be released as advance to the implementing agency only after placement of letter of award(s) to the selected vendors. The implementing agencies may pass on this fund to the selected vendors in different stages on achievement of various milestones as per terms and conditions of letter of award(s). Second installment up to 30% of the applicable CFA would be released on submission of UCs and SoE for the first release. The balance eligible CFA 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.

d. Monitoring and maintenance

Selected vendors shall be responsible for all aspects of solarisation viz., design, supply, installation and commissioning. 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. 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 authorised service centre in each operational district and a helpline in local language in each operational State.

Under the Programme along with solarisation, the vendor shall also provide a remote monitoring system. It will be mandatory to submit quarterly maintenance report along with performance data of solar power plant online to MNRE in a manner and format prescribed by MNRE.

Monitoring of the Scheme and its implementation will be carried out during the period of implementation of the Scheme as is given below:

- i. The implementing agency would be responsible for monitoring parameters such as end-use verification and compilation of statistical information.
- ii. Implementing agencies will submit monthly progress report for the sanctioned projects.
- iii. Funds may be released by implementing agency to the vendor on submission of bank guarantee equivalent to 10% of the cost of systems installed by that vendor for a period of five years. Alternatively, BG may be provided initially for a period of two years which may be extended on year to year basis thereafter.
- iv. The Ministry officials or designated agency may inspect the ongoing installation or installed plants. In case the installed systems are not as per standards, non-functional on account of poor quality of installation, or non-compliance of AMC, the Ministry reserves the right to blacklist the vendor. Blacklisting may inter-alia include the following:

- a. The Vendor/Firm will not be eligible to participate in tenders for Government supported projects.
- b. In case, the concerned Director(s) of the firm/company joins another existing or starts/ joins a new firm/company, the company will automatically be blacklisted.

e. Responsibilities of Implementation Agency

The Implementing Agencies will be responsible for the following activities:

- i. Issue additional instructions/ conditions such as minimum solarisation level of feeder.
- ii. Issue connectivity standards/regulations, if required, and facilitate connection to the grid.
- iii. Selection of feeder for solarisation and demand aggregation for solarisation of pumps.
- iv. Prepare proposal and submit to MNRE for sanction
- v. Conduct tendering process as per MNRE guidelines
- vi. Oversee installation of systems.
- vii. Inspection of installed systems and online submission of completion reports to MNRE.
- viii. Disbursement of MNRE CFA and submission of utilization certificates and audited statement of expenditure through EAT module.
- ix. Online submission of monthly and quarterly progress reports.
- x. Ensure project completion within the given timelines and compliance of MNRE Guidelines and Standards.
- xi. Online and offline maintenance for records.
- xii. Real time monitoring through dedicated web-portal
- xiii. Performance monitoring of installed system through third party
- xiv. Ensure compliance of AMC and training of locals by the vendors.
- xv. Carrying out publicity of the scheme so as to increase awareness, for which purpose advice of MNRE may also be adopted apart from its own publicity.
- xvi. Any other activity to ensure successful implementation of the programme.

4. Quality Assurance and Evaluation Mechanism

Systems installed under this Programme should meet technical specification and construction standards as specified by BIS and MNRE from time to time. Non-compliance will be taken seriously to the extent of blacklisting of the vendor, in the same manner as specified, apart from taking action under any other law in force. In case of centralized tendering the CPSUs will be responsible for performance evaluation of the selected vendors. Evaluation of pilot implementation of Component-A and Component-C will be carried out through third party selected for this purpose. In order to ensure, the scheme meets expected outcomes continuous evaluation of scheme would be undertaken and mid-course correction, as required, shall be implemented.

5. Interpretation of the Guidelines

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

The Guidelines would be reviewed by the Ministry from time to time and necessary modifications would be incorporated after getting approval of Minister, NRE.

Annexure-I

STANDARD

POWER PURCHASE AGREEMENT 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 nine (9) 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 ofMillion 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 nine 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 11 Months from the Date of issue of LoA. In case, the Commissioning of the Project is delayed beyond 11 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 11 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):	<i>Generation Loss = [(Average Generation per hour during the Contract Year) × (number of hours of grid unavailability during the Contract Year)]</i> 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.

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.	<i>Minimum Generation Compensation = 50% of [(Average Generation per hour during the month) X (number of backdown hours during the month)] X PPA tariff</i> Where, Average Generation per hour during the month (kWh) = Total generation in the month (kWh) ÷ Total hours of generation in the month

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 nine (9) 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, the 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 the 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.

17.13 *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:

- 1.
- 2.

Witness:

- 1.
- 2.

Annexure-II

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.

III. (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)

IV. 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. ____ Khewat
 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 :

F. No. 32/645/2017-SPV Division
Government of India
Ministry of New and Renewable Energy

Block no. 14, CGO Complex,
Lodi Road, New Delhi -110003

Date: 04 December 2020

Office Memorandum

Subject: Guidelines for Implementation of Feeder Level Solarisation under Component-C of PM-KUSUM Scheme

Vide OM of even number dated 04.11.2020, Ministry had issued scale-up and expansion of Pradhan Mantri Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM) Scheme. Under the scaled up Scheme, a target of solarization of 7.5 lakh existing agricultural pumps has been kept through feeder level solarization under Component-C.

2. Under the above mentioned Order, it was also informed that guidelines for feeder level solarization under Component-C will be issued separately. Accordingly, in continuation of the above mentioned Order and Guidelines for PM KUSUM Scheme dated 22.07.2019 along with amendments and additions thereof, undersigned is directed to issue the Guidelines for implementation of feeder level solarisation under Component-C of PM-KUSUM Scheme.
3. This issues with approval of Competent Authority.



(Shobhit Srivastava)
Scientist-D

To

All concerned

Guidelines for Implementation of Feeder Level Solarisation under Component-C of PM-KUSUM Scheme

1. Background

Ministry had issued detailed Guidelines for implementation of Component-C of PM-KUSUM Scheme on 8 November 2019. As per provisions of the PM-KUSUM Scheme, the grid connected agriculture pumps can be solarised with central and state subsidy of 30% each and farmer's contribution of 40%. The solar capacity allowed is up to two times of the pump capacity in kW and surplus power will be purchased by DISCOM. Since this component was to be implemented on pilot mode, flexibility was given to states for using different models like net-metering, replacing pump with BLDC pump or any other innovative model as deemed fit by the states.

Based on discussions held with states it has been decided to also include feeder level solarisation under Component-C of PM-KUSUM Scheme. Accordingly, these guidelines are being issued to provide broad implementation framework for feeder level solarisation.

2. Implementation Methodology

The Distribution Company (DISCOM)/Power Department will be the implementing agency for feeder level solarisation in their respective areas. However, state Government may appoint any other expert agency to help DISCOM for tendering and other related activities of installation of solar power plant for feeder level solarisation.

Where agriculture feeders have already been separated the feeders may be solarised under the scheme. This will lead to lower cost both in terms of lower capital cost and cost of power. 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 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 CUF of 19%. Higher or lower CUF, depending upon the average solar insolation available in the areas, may be considered for assessing solar power capacity.

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 depending upon on factors like availability of land, technical feasibility, etc., and 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.

For the purpose of calculating CFA, the cost of installation of solar power plant has been estimated as Rs. 3.5 Cr/MW. Under the Scheme 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.

A. Implementation under CAPEX Model

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. 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. 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. 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.

Advance CFA up to 40% of the total eligible CFA will be released to DISCOMs on completion of tendering process and signing of work agreement with EPC contractor selected for installation of solar power plant. Balance CFA will be released on successful commissioning of solar power plant and plant starts supplying power to agriculture feeder(s). The process of tendering and signing of work agreement with EPC contractor should normally be completed by implementing agency within six months from the date of issuance of sanction by MNRE.

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. Payment for O&M of solar plant can be linked with energy production. In case of failure of solar power plant to supply required solar power for the complete 25 years of project life, the MNRE may direct the DISCOM to refund the CFA amount on prorata basis. An undertaking to this effect will be submitted by DISCOM to MNRE.

B. Implementation under RESCO Model

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. The developer will get CFA @ 30% of the estimated cost of installation of solar power plant i.e. Rs. 1.05 Cr/MW (30% of Rs. 3.5 Cr/MW). 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. 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.

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 30% CFA, to supply power to farmers of an agriculture feeder at present subsidised rates or any other rate fixed by state Government. For example, if present subsidised rate for agriculture is Rs. 1.50/kWh, the RESCO developer will be selected on the basis of lowest VGF bidden for supply of solar power at Rs. 1.50/kWh.

CFA up to 100% of the total eligible CFA will be released to the RESCO developer through DISCOM on successful commissioning and declaration of Commercial Operation Date (COD) of solar power plant. The release of CFA to RESCO developer is subject to submission of bank guarantee equivalent to CFA amount. Bank Guarantee will be released in four lots of 25% each on successful operation of plant after 2.5 yrs, 5 yrs, 7.5 yrs and 10 yrs from CoD. 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. The maximum timeline allowed for commissioning of solar power plant by RESCO Developer will be nine months from the date of signing of PPA. 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.

3. Feeder Separation:

Where agriculture feeders are not separated, loan for feeder separation will be available from NABARD/PFC/REC. Ministry of Power is also in process of finalising a Scheme to provide assistance for feeder separation. The savings on account of electricity subsidy on agriculture and the possible income from the surplus electricity generated by the solar power plant when it is not being used for irrigation can also be used to pay off the loan taken for feeder separation.

4. Water saving and enhancing farmers' income

The objective of Component-C of PM-KUSUM Scheme is to provide reliable day-time power to farmers, enhancing their income by purchasing surplus solar power and thus

incentivising them for saving water. In case of feeder level solarisation, farmers will get daytime reliable solar power for irrigation, but there is no provision of selling surplus solar power. Therefore, farmers can be incentivised for saving water and enhancing their income. 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 incentivise farmers for consuming power less than benchmark consumption. 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. This will be an important measure for conserving groundwater level.

5. Feeder level solarisation with enhanced capacity of solar plant

The state may choose to install feeder level solar power plant of capacity higher than capacity required for supplying power to agriculture feeder. The additional solar power generated may be used for supplying nearby rural/urban loads during day time or alternatively stored/banked for supplying power during evening hours for lighting/induction cooking and other household purposes. However, in this case CFA will be limited for solar capacity required for supplying power to the agriculture feeder.

6. Allocation of capacity and Service Charges

Under Component-C of PM-KUSUM Scheme solarisation of total 4 lakh grid connected pumps are targeted for sanction by 2020-21 and 50% of these are to be solarised through feeder level solarisation and balance 50% through individual pump solarisation. The Scheme being demand driven the capacity will be allocated to states depending upon demand raised by them. MNRE will request states to send their demand within given timeframe. The states may send their demand for individual pump solarisation or feeder level solarisation or both. The allocation of capacity will be made by Screening Committee headed by Secretary, MNRE. Implementing agency will get service charges as applicable under Scheme Guidelines.

7. System Specifications and Quality Control

All components used for installation of solar power plants shall conform 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 and modules.

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.

8. Monitoring

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.

9. Interpretation of the Guidelines

In case of any ambiguity in interpretation of any of the provisions of these guidelines, the decision of the Ministry shall be final. The Guidelines would be reviewed by the Ministry from time to time and necessary modifications would be incorporated after getting approval of competent authority.

F. No. 32/645/2017-SPV Division
Government of India
Ministry of New and Renewable Energy

Block-14, CGO Complex,
Lodhi Road, New Delhi
Dated: 31 December 2019

Office Memorandum

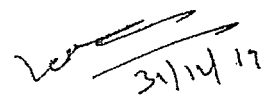
Subject: Clarification for implementation of Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhayan (PM-KUSUM) Scheme.

This refers Ministry's OM of even number dated 22.7.2019 and dated 19.8.2019 vide which Guidelines and amendment in Guidelines for implementation of PM-KUSUM Scheme were issued respectively.

2. Clarifications have been sought by Implementing Agencies on certain issues related to implementation of PM-KUSUM Scheme. Accordingly, following is clarified:

- a. The Distribution Companies (DISCOMs) can, if they desire so, pass on the Procurement Based Incentive (PBI) given to DISCOMs by the Central Government under Component-A of the Scheme, to the Renewable Energy Power Plant owner to get more competitive tariff of RE Power under the Scheme.
 - b. Implementing Agencies, if they desire so, can invite a single bid under Component-A of the Scheme on the basis of pre-fixed levelised tariff for installation of RE power plants for all distribution sub-stations in the state/DISCOM area. However, adequate measures should be taken to ensure transparency & objectivity for allocating capacity to applicants. Further, in case the applications are received for capacity that is more than capacity available for injection at a particular distribution sub-station, a transparent methodology may be adopted for allocation of capacity in such cases.
 - c. Regarding availability of Central Financial Assistance (CFA) for solarisations of pumps of capacity above 7.5 HP under Component-C of the Scheme, it is again clarified that 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 pumps of capacity 7.5 HP in the respective State/UTs.
3. This issues with the approval of Competent Authority.

To
All Concern


(J K Jethani)
Scientist-E

158
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F. No. 32/54/2018- SPV Division
Government of India
Ministry of New & Renewable Energy

Block No.14, CGO Complex
Lodi Road, New Delhi 110003
Dated: 17 March 2021

ORDER

Subject: Sanction for Solarization of Agricultural Feeders under Component-C of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM) for FY 2020-21

With reference to demand received from various States for solarization of agricultural feeders under Component-C of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM) Scheme for FY 2020-21, I am directed to convey the sanction of President of India for following quantities of existing grid connected agricultural pumps to State Implementation Agencies (SIAs) under the said component:

S. No.	State Implementation Agency (SIA) for Feeder Level Solarization under Component-C	Sanctioned Quantity of Solarization of Existing Agricultural Pumps (Nos.)
1	Andhra Pradesh Green Energy Corporation Limited	50,000
2	Gujarat Urja Vikas Nigam Limited	500
3	Jharkhand Bajli Vitran Nigam Limited	10,000
4	Kerala State Electricity Board Limited	2,000
5	Meghalaya Energy Corporation Limited	10,000
6	Uttar Pradesh Power Corporation Limited	30,000

2. SIAs shall follow all the terms and conditions stipulated in the Guidelines of the above mentioned Scheme issued vide Order no. 32/645/2017-SPV Division dated 22.07.2014 and amendments thereof, and Feeder Level Solarization Guidelines issued vide Order no. 32/645/2017-SPV Division dated 04.12.2020.

3. The requirement of total annual power for an agriculture feeder shall be assessed by the concerned SIA 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 RFSO 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 CUF of 19%. Higher or lower CUF, depending upon the average solar insolation available in the areas, may be considered for assessing solar power capacity.

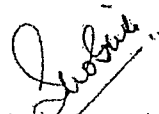
4. For the purpose of calculating CFA, the cost of installation of solar power plant has been estimated as Rs. 3.5 Cr/MW. Central Financial Assistance will be available at 30% of the estimated cost of installation of solar power plant i.e. Rs. 1.05 Cr/MW (30% of Rs. 3.5 Cr/MW). Feeders with connected agricultural pumps of any capacity can be solarized, however, feeder solarization capacity and the corresponding CFA will be worked out based on maximum agricultural pump capacity of 7.5 HP.

(Signature)

16. As per Rule 234 of GFR-2017, the sanction has been entered at S. No. 07 & Page No. 51 in the Expenditure Register of this Division.

17. This sanction is issued to State Implementation Agencies which are not Non-Governmental Organizations (NGOs)/ Civil Society Organizations (CSOs)/ Voluntary Organizations (VOs).

18. This issues with the approval of Competent Authority.


(Shobhit Srivastava)
Scientist D

Phone No: 011-24360707/1016

To

Concerned SIAs/ Distribution Companies for Feeder Level Solarization under Component-C of PM-KUSUM Scheme

Copy to:

1. Principal Director of Audit, Scientific Dept., DG, ACR Building, IP Estate, N. Delhi
2. AG, CW & M.II (Science Audit), AGCR Building, New Delhi
3. Pay and Accounts Officer, MNRE
4. IFD, MNRE
5. Sanction folder

F. No. 32/645/2017-SPV Division (Part-3)
Government of India
Ministry of New and Renewable Energy

Block no. 14, CGO Complex, Lodi
Road, New Delhi -110003

Date: 11 May 2022

Office Memorandum

Subject: Amendment in provisions of bank guarantees in PM-KUSUM Scheme Guidelines - reg.

Under Para 3(I)(A)(g) of the PM-KUSUM Guidelines issued vide OM No. 32/645/2017-SPV Division dated 22.07.2019, on 'Bank Guarantees' related to Component-A of PM-KUSUM, it has been mentioned that:

"The RPG shall provide the following Bank Guarantees to DISCOM as follows:

- *Earnest Money Deposit (EMD) of Rs. 1 Lakh/MW in the form of Bank Guarantee along with EoI.*
- *Performance Bank Guarantee (PBG) of Rs. 5 Lakh/MW within 30 days from date of issue of Letter of Award.*

The Bank Guarantees against EMD shall be returned to the selected RPG on submission of valid PBGs. The selected RPGs are required to sign PPA with the DISCOM in line with the timeline given in the Guidelines. 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. 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). The PBGs shall be valid for a period of 12 months from the date of issue of LoA for the REPP. The PBG will be returned to the RPG immediately after successful commissioning of solar power plant, after taking into account any penalties due to delay in commissioning as per provisions stipulated in the Guidelines."

2. Undersigned is directed to convey that the requirement of separate PBG of Rs. 5 Lakh/MW has been removed and the above clause stands amended as given below:

"The Solar Power Generator (SPG) shall provide Earnest Money Deposit (EMD) of Rs. 1 Lakh/MW in the form of Bank Guarantee along with EoI. The EMD of Rs. 1 lakh per MW will be converted into PBG for the successful bidder, who has signed the PPA within stipulated time period. In case, the selected SPG fails to execute the PPA within the stipulated time period, the Bank Guarantee shall be encashed by DISCOM as penalty. In case, a bidder is not selected, DISCOM shall release the EMD within 15 days of the date of issue of LoA to selected SPG(s). The PBGs shall be valid for a period of 12 months from the date of issue of LoA for the Solar Energy Project. The PBG will be returned to the SPG immediately after successful commissioning of solar power plant, after taking into account any penalties due to delay in commissioning as per provisions stipulated in the Guidelines."

The above amendment in Component-A will apply prospectively to all projects which have not been physically set up on the date of issue of this OM.

3. Under Para 2(B) of the Guidelines for Solarization of Agriculture Feeders under Component-C of PM-KUSUM Scheme, issued vide OM No. 32/645/2017-SPV Division dated 04.12.2020, it has been mentioned that:

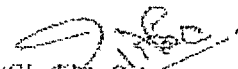
"CFA up to 100% of the total eligible CFA will be released to the RESCO developer through DISCOM on successful commissioning and declaration of Commercial Operation Date (COD) of solar power plant. The release of CFA to RESCO developer is subject to submission of bank guarantee equivalent to CFA amount. Bank Guarantee will be released in four lots of 25% each on successful operation of plant after 2.5 yrs, 5 yrs, 7.5 yrs and 10 yrs from CoD."

4. Undersigned is directed to convey that that requirement of bank guarantee in the above clause has been removed and the clause stands amended as given below:

"CFA up to 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. Further, a suitable clause in 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. 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."

The above amendment in Component-C will be applicable prospectively to all sanctions for feeder solarization issued by MNRE under the Scheme, except for the cases where bids are closed before issuance of this amendment.

5. This issues with approval of Competent Authority.


(Shobhit Srivastava)
Scientist-D

To

All concerned

No. 283/16/2023-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)

ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

Atal Akshay Urja Bhawan,

Lodhi Road, New Delhi – 110003

Dated: 10th March, 2023

OFFICE MEMORANDUM

Sub: Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirements for Compulsory Registration) Order, 2019: Amendment - reg.

Ref:

- i. MNRE's O.M. No. 283/54/2018-GRID SOLAR dated 2nd January, 2019 reg. Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirements for Compulsory Registration) Order, 2019; and
- ii. Amendment to Order at (i) above vide MNRE's O.M. No. 283/54/2018-GRID SOLAR-Part(1) dated 2nd February, 2021.
- iii. Amendment to Order at (i) above vide MNRE's O.M. No. 283/54/2018-GRID SOLAR-Part(2) dated 13th January, 2022.
- iv. Amendment to Order at (i) above vide MNRE's O.M. No. 283/54/2018-GRID SOLAR-Part(2) dated 28th March, 2022.
- v. Clarification to Order at (i) above vide MNRE's O.M. No. 283/54/2018-GRID SOLAR-Part(5) dated 07th October, 2022.

With reference to the Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirements for Compulsory Registration) Order, 2019 and subsequent amendments and clarification thereto, the undersigned is directed to convey that subject Order is hereby held in abeyance for one financial year, i.e. FY 2023-24. Thus Projects commissioned by 31.03.2024 will be exempted from the requirement of procuring Solar PV modules from ALMM.

2. This issues in line with the approval of Hon'ble Minister (NRE & Power).



(Sanjay G. Karndhar)

Scientist-D

Email: karndhar.sg@nic.in

To:

All concerned

Copy to:

Director (Technical), NIC, MNRE, for uploading on MNRE Website

No. 283/16/2023-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)

ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

Atal Akshay Urja Bhawan,

Lodhi Road, New Delhi – 110003

Dated: 9th February 2024

OFFICE MEMORANDUM

Sub: Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirements for Compulsory Registration) Order, 2019 - reg.

Ref: /

Vide MNRE's Order of even no. dated 10th March 2023, the Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirements for Compulsory Registration) Order, 2019 (ALMM Order) was held in abeyance for one financial year, i.e. FY 2023-24. As per further decision on this issue, the undersigned is directed to convey that:

- a) The ALMM [Approved List of Models & Manufacturers] for Solar PV Modules, is being re-imposed with effect from 1st April, 2024.
 - b) The ALMM will apply as per the Law, only to those projects which are sponsored/ subsidized by the Government. ALMM will apply to Government or its agencies procuring power for its own consumption or for distribution to the people through Distribution Companies. ALMM will apply to Solar PV Rooftops and PM KUSUM; which are subsidized. The ALMM will not apply to projects set up under open access or as captive by private parties. In other words, ALMM will not be applicable for people who set up their own capacity.
 - c) Aforesaid order of even no. dated 10th March 2023, inter-alia, conveyed that projects commissioned by 31st March 2024 will be exempted from the requirement of procuring Solar PV modules from ALMM. However, now, it has been decided that the relaxation in ALMM shall apply to all cases where the projects are in advanced stage of construction and the order for the modules has been placed before 31st March 2024. That the plant is in advanced stages of construction and the irrevocable LC has been opened before 31st March, 2024, will be subject to verification.
2. This issues in line with the approval of Hon'ble Minister (NRE & Power).



(Sanjay G. Karndhar)

Scientist-E

Email: karndhar.sg@nic.in

To: All concerned

Copy to: Director (Technical), NIC, MNRE, for uploading on MNRE Website

No. 283/16/2023-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)

ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

Atal Akshay Urja Bhawan,
Lodhi Road, New Delhi – 110003

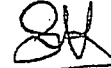
Dated: 15th February 2024

OFFICE MEMORANDUM

Sub: Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirements for Compulsory Registration) Order, 2019 - reg.

The undersigned is directed to convey that the O.M. of even no. dated 9th February, 2024 (copy enclosed) on the subject issue, is hereby held in abeyance till further orders.

2. This issues with the approval of Hon'ble Minister (Power & NRE).



(Sanjay G. Karndhar)
Scientist-E

Email: karndhar.sg@nic.in

To: All concerned

Copy to: Director (Technical), NIC, MNRE, for uploading on MNRE Website

No. 283/16/2023-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)

ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

Atal Akshay Urja Bhawan,
Lodhi Road, New Delhi – 110003

Dated: 9th February 2024

OFFICE MEMORANDUM

Sub: Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirements for Compulsory Registration) Order, 2019 - reg.

Ref:

Vide MNRE's Order of even no. dated 10th March 2023, the Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirements for Compulsory Registration) Order, 2019 (ALMM Order) was held in abeyance for one financial year, i.e. FY 2023-24. As per further decision on this issue, the undersigned is directed to convey that:

- a) The ALMM [Approved List of Models & Manufacturers] for Solar PV Modules, is being re-imposed with effect from 1st April, 2024.
 - b) The ALMM will apply as per the Law, only to those projects which are sponsored/ subsidized by the Government. ALMM will apply to Government or its agencies procuring power for its own consumption or for distribution to the people through Distribution Companies. ALMM will apply to Solar PV Rooftops and PM KUSUM; which are subsidized. The ALMM will not apply to projects set up under open access or as captive by private parties. In other words, ALMM will not be applicable for people who set up their own capacity.
 - c) Aforesaid order of even no. dated 10th March 2023, inter-alia, conveyed that projects commissioned by 31st March 2024 will be exempted from the requirement of procuring Solar PV modules from ALMM. However, now, it has been decided that the relaxation in ALMM shall apply to all cases where the projects are in advanced stage of construction and the order for the modules has been placed before 31st March 2024. That the plant is in advanced stages of construction and the irrevocable LC has been opened before 31st March, 2024, will be subject to verification.
2. This issues in line with the approval of Hon'ble Minister (NRE & Power).



(Sanjay G. Karndhar)

Scientist-E

Email: karndhar.sg@nic.in

To: All concerned

Copy to: Director (Technical), NIC, MNRE, for uploading on MNRE Website

No. 283/16/2023-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy (MNRE)

ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

Atal Akshay Urja Bhawan,
Lodhi Road, New Delhi – 110003

Dated: 29th March, 2024

OFFICE MEMORANDUM

**Sub: Approved Models and Manufacturers of Solar Photovoltaic Modules
(Requirements for Compulsory Registration) Order, 2019 - reg.**

1. Vide MNRE's Order of even no. dated 10th March 2023, the Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirements for Compulsory Registration) Order, 2019 (ALMM Order) was held in abeyance for one financial year, i.e. FY 2023-24. It is clarified that the ALMM [Approved List of Models & Manufacturers] for Solar PV Modules, shall accordingly come into effect from 1st April, 2024.
2. Each project where the solar PV modules have been received at the project site by 31st March, 2024 and is unable to get commissioned by that day, on account of reasons beyond the control of the renewable power developer, would be examined separately.
3. This issues with the approval of Hon'ble Minister (Power & NRE).



(Sanjay G. Karndhar)

Scientist-E

Email: karndhar.sg@nic.in

To: All concerned

Copy to: Director (Technical), NIC, MNRE, for uploading on MNRE Website

147

F. No. 32/54/2018- SPV Division
Government of India
Ministry of New & Renewable Energy

Atal Akshaya Urja Bhawan
Lodi Road, New Delhi 110003
Dated: 05 August 2022

ORDER

Subject: Sanction for Solarization of Agricultural Feeders under Component-C of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM)

With reference to demand received from various States for solarization of agricultural feeders under Component-C of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM) Scheme, I am directed to convey the sanction of President of India for following quantities of existing grid connected agricultural pumps to State Implementation Agencies (SIAs) under the said component:

S. No.	State Implementation Agency (SIA)	Sanctioned Quantity of Solarization of Existing Agricultural Pumps (Nos.)
1	Chhattisgarh State Power Distribution Company Limited (CSPDCL)	286735
2	Gujarat Urja Vikas Nigam Limited (GUVNL)	260668
3	Uttar Haryana Bijli Vitran Nigam Limited	27937
4	Madhya Pradesh Urja Vikas Nigam Limited (MPUVNL)	82545
5	Distribution Companies in Odisha*	8689
6	Punjab Energy Development Agency (PEDA)	86889
7	Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO)	8689
	Total	762152

3. SIAs shall follow all the terms and conditions stipulated in the Guidelines of the above mentioned Scheme issued vide Order no. 32/645/2017-SPV Division dated 22.07.2019 and amendments thereof, and Feeder Level Solarization Guidelines issued vide Order no. 32/645/2017-SPV Division dated 04.12.2020.

4. The requirement of total annual power for an agriculture feeder shall be assessed by the concerned SIA 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 CUF of 19%. Higher or lower CUF, depending upon the average solar insolation available in the areas, may be considered for assessing solar power capacity.

5. For the purpose of calculating CFA, the cost of installation of solar power plant has been estimated as Rs. 3.5 Cr/MW. Central Financial Assistance will be available at 30% of



the estimated cost of installation of solar power plant i.e. Rs. 1.05 Cr/MW (30% of Rs. 3.5 Cr/MW). Feeders with connected agricultural pumps of any capacity can be solarized. However, feeder solarization capacity and the corresponding CFA will be worked out based on maximum agricultural pump capacity of 7.5 HP.

6. The process of tendering and signing of work agreement with EPC contractor shall be completed by the concerned SIA within six months from the date of issuance of sanction by MNRE. The maximum timeline allowed for commissioning of solar power plant by RESCO Developer will be nine months from the date of signing of PPA. SIAs shall submit progress reports and completion reports on the online portal for PM-KUSUM Scheme.

7. If implemented in RESCO mode, concerned State Government 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 30% CFA, to supply power to farmers of an agriculture feeder at present subsidised rates or any other rate fixed by state Government. For example, if present subsidised rate for agriculture is Rs. 1.50/kWh, the RESCO developer will be selected on the basis of lowest VGF bid for supply of solar power at Rs. 1.50/kWh.

8. SIAs/ DISCOMs shall incentivise farmers for consuming power less than benchmark consumption. 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.

9. SIAs shall carry out various activities as mentioned under Section on Responsibilities of State Implementation Agency under Component-C of the Guidelines, including creating awareness about the scheme. MNRE may retain a certain amount from service charge for nation-wide centralised IEC activities.

10. Eligible CFA and service charges would be released to SIAs as per provisions of Administrative Approval dated 08.03.2019 and terms and conditions stipulated in the Scheme Guidelines mentioned above.

11. The condition of domestic content requirement for solar cells has been waived off for the feeder solarization projects under Component-C for which work is awarded to the implementing company (EPC contractor in case of CAPEX or the RESCO Company) by 20.06.2023.

12. SIA shall be liable for recovery of the whole or part amount of the CFA, with applicable penal interest, in case of non-compliance of the provisions of the Scheme/Sanction.

13. In terms of Rule 230 (7) of GFR 2017 and instructions of DoL, SIAs shall record the receipt of incentives and the expenditure therefrom in the EAT module of PFMS.

14. In terms of the Rule 230 (1) of GFR, concerned SIA will certify that they have not obtained or applied for grants for the same purpose or activity from any other Ministry or Department of the Government of India or State Government.

15. In terms of provisions contained in Rule 236(i) of GFR 2017, the account of concerned SIA shall be open to inspection by the sanctioning authority and audit (both by CAG of India and Internal Audit by the Principal Accounts Office of the MNRE), whenever the organization is called upon to do so.

16. SIAs will furnish year wise Utilization Certificate (UC) in the prescribed format of GFR-12(A) and Audited Statement of Expenditure (ASoE) along with detailed progress report periodically as per provisions of the scheme.

17. As per Rule 234 of GFR-2017, the sanction has been entered at S. No. 09 & Page No. 52 in the Expenditure Register of this Division.

18. This issues with the approval of Competent Authority.


(Shobhit Srivastava)
Scientist D

To

Concerned SIAs/ Distribution Companies for Feeder Level Solarization under Component-C of PM-KUSUM Scheme

Copy to:

1. Principal Director of Audit, Scientific Dept., DG, ACR Building, IP Estate, N. Delhi
2. AG, CW & M.II (Science Audit), AGCR Building, New Delhi
3. Pay and Accounts Officer, MNRE
4. IFD, MNRE
5. Sanction folder

F. No. 32/54/2018- SPV Division
Government of India
Ministry of New & Renewable Energy

Block No.14, CGO Complex
Lodi Road, New Delhi 110003
Dated: 18 May 2022

ORDER

Subject: Sanction for Solarization of Agricultural Feeders under Component-C of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM)

With reference to demand received from various States for solarization of agricultural feeders under Component-C of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM) Scheme, I am directed to convey the sanction of President of India for following quantities of existing grid connected agricultural pumps to State Implementation Agencies (SIAs) under the said component:

S. No.	State Implementation Agency (SIA)	Sanctioned Quantity of Solarization of Existing Agricultural Pumps (Nos.)
1	Chhattisgarh State Power Distribution Company Limited (CSPDCL)	43265
2	Gujarat Urja Vikas Nigam Limited (GUVNL)	39332
3	Uttar Haryana Bijli Vitran Nigam Limited	4215
4	Madhya Pradesh Urja Vikas Nigam Limited (MPUVNL)	12455
5	Distribution Companies in Odisha*	1311
6	Punjab Energy Development Agency (PEDA)	13111
7	Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO)	1311
	Total	115000

*State Government to finalize Discom-wise allocation and intimate to MNRE

3. SIAs shall follow all the terms and conditions stipulated in the Guidelines of the above mentioned Scheme issued vide Order no. 32/645/2017-SPV Division dated 22.07.2019 and amendments thereof, and Feeder Level Solarization Guidelines issued vide Order no. 32/645/2017-SPV Division dated 04.12.2020.

4. The requirement of total annual power for an agriculture feeder shall be assessed by the concerned SIA 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 CUF of 19%. Higher or lower CUF, depending upon the average solar insolation available in the areas, may be considered for assessing solar power capacity.

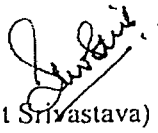


5. For the purpose of calculating CFA, the cost of installation of solar power plant has been estimated as Rs. 3.5 Cr/MW. Central Financial Assistance will be available at 30% of the estimated cost of installation of solar power plant i.e. Rs. 1.05 Cr/MW (30% of Rs. 3.5 Cr/MW). Feeders with connected agricultural pumps of any capacity can be solarized, however, feeder solarization capacity and the corresponding CFA will be worked out based on maximum agricultural pump capacity of 7.5 HP.
6. Timelines for implementation shall be as per the Scheme issued vide Order no. 32/645/2017-SPV Division dated 22.07.2019 and Feeder Level Solarization Guidelines issued vide Order no. 32/645/2017-SPV Division dated 04.12.2020 and amendments thereof.
7. If implemented in RESCO mode, concerned State Government 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 30% CFA, to supply power to farmers of an agriculture feeder at present subsidised rates or any other rate fixed by state Government. For example, if present subsidised rate for agriculture is Rs. 1.50/kWh, the RESCO developer will be selected on the basis of lowest VGF bided for supply of solar power at Rs. 1.50/kWh.
9. SIAs shall carry out various activities as mentioned under Section on Responsibilities of State Implementation Agency under Component-C of the Guidelines, including creating awareness about the scheme. MNRE may retain a certain amount from service charge for nation-wide centralised IEC activities.
10. Eligible CFA and service charges would be released to SIAs as per provisions of Administrative Approval dated 08.03.2019 and terms and conditions stipulated in the Scheme Guidelines mentioned above.
11. SIAs will ensure use of indigenously manufactured solar panels with indigenous solar cells and modules. Further, the balance of system should also be manufactured indigenously. The vendor shall provide declaration to concerned SIA with a list of imported components used in the solarisation system.
12. SIA shall be liable for recovery of the whole or part amount of the CFA, with applicable penal interest, in case of non-compliance of the provisions of the Scheme/Sanction.
13. In terms of Rule 230 (7) of GFR 2017 and instructions of DoE, SIAs shall record the receipt of incentives and the expenditure therefrom in the EAT module of PFMS.
14. In terms of the Rule 230 (1) of GFR, concerned SIA will certify that they have not obtained or applied for grants for the same purpose or activity from any other Ministry or Department of the Government of India or State Government.
15. In terms of provisions contained in Rule 236(i) of GFR 2017, the account of concerned SIA shall be open to inspection by the sanctioning authority and audit (both by CAG of India and Internal Audit by the Principal Accounts Office of the MNRE), whenever the organization is called upon to do so.
16. SIAs will furnish year wise Utilization Certificate (UC) in the prescribed format of GFR-12(C) and Audited Statement of Expenditure (ASoE) along with detailed progress report periodically as per provisions of the scheme.



17. As per Rule 234 of GFR-2017, the sanction has been entered at S. No. 04 & Page No. 51 in the Expenditure Register of this Division.

18. This issues with the approval of Competent Authority.


(Shobhit Srivastava)

Scientist D

Phone No: 011-24360707/1016

To

Concerned SIAs/ Distribution Companies for Feeder Level Solarization under Component-C of PM-KUSUM Scheme

Copy to:

1. Principal Director of Audit, Scientific Dept., DG, ACR Building, IP Estate, N. Delhi
2. AG, CW & M.II (Science Audit), AGCR Building, New Delhi
3. Pay and Accounts Officer, MNRE
4. IFD, MNRE
5. Sanction folder

	Gujarat Urja Vikas Nigam Limited (An ISO 9001:2008 Company) CIN U40109GJ2004SGC045195 Registered and Corporate Office: Sardar Patel Vidyut Bhavan Race Course, Vadodara-390007		
	Email: cetech.guvnl@gmail.com	web site: www.guvnl.com	Tele (Di) : (0265) 2340205 PBX : (0265) 2310582 to 86 FAX : (0265) 2337918, 2338164

No. GUVNL/Tech/Solar-Cell/ PM-KUSUM-C/FLS/1693

Date: 21/06/2022

To
 The Managing Director,
 DGVCL/MGVCL/PGVCL/UGVCL
 Corporate Office,
 Surat/Vadodara/Rajkot/Mehsana

Sub: Revision in allocation of Quantity and inviting Request for Selection (RfS) of Solar Power Generator (SPG) for Feeder Level Solarization Component-C of PM-KUSUM Scheme.

- Ref: 1. MNRE's OM No. 32/645/2017-SPV DIVISION, Date: 04-12-2020
 2. MNRE's sanction vide no-32/54/2018- SPV DIVISION Date: 17-03-2021
 3. EPD, GoG letter to MNRE no-REN/11/2021/552/B1 Date: 13-01-2022
 4. EPD, GoG letter to GUVNL no-SLR/11/2016/2284/B1 Date: 07-04-2022
 5. MNRE's sanction vide no-32/54/2018- SPV DIVISION Date: 18-05-2022
 6. GUVNL's letter to all DISCOM. no-GUVNL/Tech/Solar-Cell/PM-KUSUM-C/FLS/1500 Date: 01-06-2022

Respected Sir,

In continuation with the GUVNL's letter dated 01-06-2022 to all DISCOMs for inviting RfS under Component-C (FLS). It is to inform you that MNRE vide email dated: 24-05-2022 informed all SIAs regarding initiating the tendering process for the balance quantity as under:-

"Proposal for extension and expansion of the PM-KUSUM Scheme has been submitted for approval of the Ministry of Finance and the remaining quantities, which could not be allocated in this round, would be allocated once MoF's approval is received. In the meantime, SIAs anticipating fresh/ additional allocations can undertake activities such as identification of sub-station/feeders/beneficiaries; preparation of tender documents; filing of tariff petition with the respective State regulator, if required; initiate the tendering process; etc. However, the Letter of Award shall be given only after getting the firm allocation from the Ministry."

Sr. No.	State	Feeder Level Solarization (Nos)	Balance Demand pending for approval (Nos.)
2	Gujarat	39832	260668

During the PRM held under the chairmanship of MD, GUVNL with MDs and CEs of all DISCOMs on 15-06-2022, it was discussed and decided to invite Request for Selection

(RfS) under Component-C of FLS for total demanded quantity : 3,00,000 nos. of agriculture pumps.

Considering the status of existing Ag. consumers having load of up to 7.5HP, the quantity to be distributed among all DISCOMs in proportionate to the total connections of up to 7.5 HP is proposed as under:-

DISCOM	Total Ag. Connections	Total Ag. Connections Up to 7.5 HP	Earlier Allocation to DISCOM (Agriculture Pumps)	Proposed Fresh Allocation to DISCOM (Agriculture Pumps)	Total Allocation to DISCOM (Agriculture Pumps) For inviting RFS
DGVCL	206102	164232	465	39035	39500
MGVCL	202749	133882	1855	30345	32200
PGVCL	1085119	758895	30820	151680	182500
UGVCL	413981	190410	6692	39108	45800
Total	1907951	1247419	39832	260168	300000

Here, it is apt to mention that the tariff to be discovered for the Solar plants will be different for different capacity of Solar plants at different locations.

Further, MNRE is providing CFA for agriculture connections pumps of capacity up to 7.5 HP only. Hence, DISCOMs are requested to select feeders having at least 90% agriculture connections up to 7.5 HP firstly. In case of 90% criteria is not met, DISCOMs may select feeders in down grade manner gradually. i.e. first 89%, 88 %up to 80 %.

In view of the above, GUVNL being an SIA, hereby authorize all DISCOMs to invite the RfS to select SPG as per the tender to be modified by PGVCL for the Feeder level Solarization under Component-C of PM-KUSUM Scheme, in consultation with GUVNL.

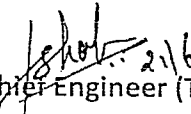
DISCOM are requested, after selection of SPG / parties the discovered tariff may be consulted with GUVNL and subsequently before signing agreement, tariff needs to be adopted by GERC.

Concerned officers may please be directed to take necessary action in this matter by observing MNRE's guideline dated: 04-12-2020 and amendments thereof.

This is submitted with the approval of MD, GUVNL.

Thanking you,

Yours Faithfully,


Addl. Chief Engineer (Tech)

CFWC:-

1. The Director(Tech) – GUVNL, Vadodara
2. GM (Commerce / IPP)

	Gujarat Urja Vikas Nigam Limited		
	Sardar Patel Vidyut Bhavan, Race Course, Vadodara: 390 007		
	CIN U40109GJ2004SGC045195	An ISO 9001:2015 Certified Company Phone: 0265-2311797	
No : GUVNL/Tech/ Solar Cell/PM KUSUM-C/FLS / <u>1551</u> Date : <u>21-09-2023</u> By e-Sarkar & E-mail			

To
The Chief Engineer (P&P),
UGVCL,
Corporate Office,
Mehsana

Sub.- Revision in allocation for Solarization of AG connections under Feeder Level Solarization Component-C of PM-KUSUM Scheme.

- Ref.:- 1) UGVCL's letter No.-UGVCL/R&C/Solar Cell/PM KUSUM C-FLS/1182 dated 13-09-2023
2) GUVNL's letter No.-GUVNL/Tech/Solar-Cell/PM-KUSUM-C/FLS/1495 dated 06-09-2023
3) GUVNL's letter No.-GUVNL/Tech/Solar-Cell/PM-KUSUM-C/FLS/1693 dated 21-06-2022

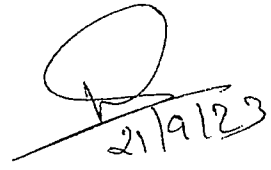
This office vide letter No. 1495 dated 06-09-2023 had conveyed the Re-allocation of quantities to DISCOMs for inviting RfS for Feeder Level Solarization under Component-C of PM-KUSUM Scheme.

Now, UGVCL vide letter no. 1182 dated 13-09-2023 have submitted request for an additional allocation for solarization of Ag. connection considering unconditional acceptances received of LOI, under the scheme to file tariff petition.

In view of above, as approved by the competent Authority of GUVNL, re-allocation of quantities among all DISCOMs is as under;

DISCOM	Original Allocation (No. of Agriculture Pumps) as per letter dated <u>21-06-2022</u>	Earlier Re-allocation (No. of Agriculture Pumps) as per letter dated <u>06-09-2023</u>	Re-allocation (No. of Agriculture Pumps)
DGVCL	39500	17145	15417
MGVCL	32200	3453	3453
PGVCL	182500	228612	228612
UGVCL	45800	50790	52518
Total	300000	300000	300000

This is for further appropriate actions after observing all formalities, please.


(S. S. Modi)
Chief Engineer (Tech)

Cfwcs to:-

1. The Director (Tech/Fin.), GUVNL, Vadodara.
2. The Managing Director, DGVCL/MGVCL/PGVCL/UGVCL

32/54/2018-SPV Division-Part(1)
Government of India
Ministry of New and Renewable Energy

Atal Akshay Urja Bhavan
Lodhi Road, New Delhi 110003
Date: 15th September 2023

ORDER

Subject: Sanction of additional allocation and cancellation of existing quantities under Pradhan Mantri Kisan Urja Suraksha Evan Uттаan Mahabhiyaan (PM KUSUM) for FY 2023-24

With reference to demand received from various States for different components under PM KUSUM Scheme for FY 2023-24, and based on the approval of the Screening Committee, the undersigned is directed to convey the sanction of President of India for the following additional capacities and cancelled quantities to State Implementing Agencies/Electricity Distribution Companies (DISCOM) under Component A, B, C of PM KUSUM Scheme:

A. New approval under PM KUSUM

i) Component A

Sr No	State	New Allocation (MW)
1	Himachal Pradesh	50

ii) Component B

Sr No	State	New Allocation (Nos. of Pumps)
1	Meghalaya	1500

iii) Component C (FLS)

Sr No	State	New Allocation (Nos. of Pumps)
1	Kerala	22,187
2	Maharashtra	3,00,000
3	Gujarat	1,25,000
4	Rajasthan	1,00,000

iv) Component C(IPS)

Sr No	State	New Allocation (Nos. of Pumps)
1	Uttar Pradesh	1000

[Signature]

B. Cancellation of quantities under PM KUSUM**i) Component B**

Sr No	State	Cancelled Allocation (Nos. of Pumps)
1	Mizoram	3000

C. Re-allocation of quantities under PM KUSUM**i) Component B**

Sr No	State/SIA	Previous Allocation	Revised allocation
1	Uttarakhand	3705	3685
2	DGVCL	1394	1624
3	MGVCL	142	142
4	PGVCL	327	169
5	UGVCL	137	65

2. The project commissioning timeline shall be as mentioned in the Guidelines for implementation of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan issued vide order no. 32/645/2017-SPV Division dated 22.07.2019 and amendments thereof. SIAs/Discoms shall submit progress reports and completion reports on the online portal for PM-KUSUM Scheme.

3. SIAs/ Discoms shall follow all the terms and conditions stipulated in the Guidelines of the above mentioned Scheme issued vide Order no. 32/645/2017-SPV Division dated 22.07.2019 and amendments thereof.

4. SIAs/ Discoms shall carry out various activities as mentioned under Section on Responsibilities of State Implementation Agency under Component-A of the Guidelines.

5. SIAs/ Discoms shall be liable for recovery of the whole or part amount of the CFA, with applicable penal interest, in case of non-compliance of the provisions of the Scheme/Sanction.

6. In terms of Rule 230 (7) of GFR 2017 and instructions of DoE, SIAs/ Discoms shall record the receipt of incentives and the expenditure therefrom in the EAT module of PFMS.

7. In terms of the Rule 230 (1) of GFR, concerned SIA/ Discom(s) will certify that they have not obtained or applied for grants for the same purpose or activity from any other Ministry or Department of the Government of India or State Government.

8. In terms of provisions contained in Rule 236(i) of GFR 2017, the account of concerned SIA/Discom(s) shall be open to inspection by the sanctioning authority and audit (both by CAG of India and Internal Audit by the Principal Accounts Office of the MNRE), whenever the organization is called upon to do so.

Handwritten signature/initials

9. SIAs/ Discoms will furnish year wise Utilization Certificate (UC) in the prescribed format of GFR-12(A) and Audited Statement of Expenditure (ASoE) along with detailed progress report periodically as per provisions of the scheme.

10. As per Rule 234 of GFR-2017, the sanction has been entered at S. No. 01 & Page No. 6 in the Expenditure Register of this Division.

11. This issues with the approval of Competent Authority.

Pratil for 15/9/23

(Dr. Nikhil Gakkhar)
Scientist-C
011-20849115

To

Concerned SIAs/ Discoms/ SNAs of PM-KUSUM Scheme

Copy to:

1. Principal Director of Audit, Scientific Dept., DG, ACR Building, IP Estate, N. Delhi
2. AG, CW & M.II (Science Audit), AGCR Building, New Delhi
3. Pay and Accounts Officer, MNRE
4. IFD, MNRE
5. Sanction folder

32/54/2018-SPV Division-Part (1)
Government of India
Ministry of New and Renewable Energy

Atal Akshay Urja Bhavan
Lodhi Road, New Delhi 110003
Date: 20-December 2023

ORDER

Subject: Sanction of allocation under Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM) for Component C (FLS) during FY 2023-24 for the State of Gujarat

With reference to demand received from the State of Gujarat for solarization of Pumps under Feeder Level Solarization, under Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM) Scheme for FY 2023-24, the undersigned is directed to convey the sanction of President of India for installation of following quantities of standalone solar pumps to State Implementation Agencies (SIAs) under Component-C (FLS) of PM KUSUM Scheme:

S. No.	State Implementation Agency (SIA)	Sanctioned Quantity of Standalone Solar Pumps (Nos)
1	Gujarat Urja Vikas Nigam Ltd. (GUVNL)	200000

2. The project commissioning timeline shall be as mentioned in the Guidelines for implementation of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan issued vide order no. 32/645/2017-SPV Division dated 22.07.2019 and amendments thereof. SIAs/Discoms shall submit progress reports and completion reports on the online portal for PM-KUSUM Scheme.

3. SIA shall follow all the terms and conditions stipulated in the Guidelines of the above-mentioned Scheme issued vide Order no. 32/645/2017-SPV Division dated 22.07.2019 and amendments thereof. SIAs shall follow the Scheme Guidelines for selection of beneficiary farmer and size of pump to be installed. Further, systems installed under the Scheme should meet technical specification and construction standards as specified by BIS and MNRE from time to time.

4. SIA shall carry out various activities as mentioned under Section on Responsibilities of State Implementation Agency under Component-B of the Guidelines, including creating awareness about the scheme. MNRE may retain a certain amount from service charge for nation-wide centralised IEC activities.

5. Eligible CFA and service charges would be released to SIAs as per the terms and conditions stipulated in the Scheme Guidelines and will be released based on milestones achieved. CFA will be worked out based on type and capacity of solar pumps and respective benchmark costs as amended from time to time or the tender cost, whichever is lower. SIA shall be liable for recovery of the whole or part amount of the CFA, with applicable penal interest, in case of non-compliance of the provisions of the Scheme/Sanction.

[Signature]

6. In terms of Rule 230 (7) of GFR 2017 and instructions of DoE, SIA shall record the receipt of incentives and the expenditure therefrom in the EAT module of PFMS.
7. In terms of the Rule 230 (1) of GFR, concerned SIA will certify that they have not obtained or applied for grants for the same purpose or activity from any other Ministry or Department of the Government of India or State Government.
8. In terms of provisions contained in Rule 236(i) of GFR 2017, the account of concerned SIA shall be open to inspection by the sanctioning authority and audit (both by CAG of India and Internal Audit by the Principal Accounts Office of the MNRE), whenever the organization is called upon to do so.
9. SIA will furnish year wise Utilization Certificate (UC) in the prescribed format of GFR-12(A) and Audited Statement of Expenditure (ASoE) along with detailed progress report periodically as per provisions of the scheme.
10. As per Rule 234 of GFR-2017, the sanction has been entered at S. No. 26 & Page No. 4 in the Expenditure Register of this Division.
11. This is issued with the approval of Competent Authority.

(Dr. Nikhil Gakkhar)
20/12/23
(Dr. Nikhil Gakkhar)
Scientist-C
011-20849115

To
Gujarat Urja Vikas Nigam Ltd. (GUVNL)

Copy to:

1. Principal Director of Audit, Scientific Dept., DG, ACR Building, IP Estate, N. Delhi
2. AG, CW & M.II (Science Audit), AGCR Building, New Delhi
3. Pay and Accounts Officer, MNRE
4. IFD, MNRE
5. Sanction folder

	Gujarat Urja Vikas Nigam Limited		
	Sardar Patel Vidyut Bhavan, Race Course, Vadodara: 390 007		
	CIN U40109GJ2004SGC045195	An ISO 9001:2015 Certified Company Phone: 0265-2311797	
No : GUVNL/Tech/ Solar Cell/PM KUSUM-C/FLS ./ 118			Date : 23-01-2024
<u>By e-Sarkar & E-mail</u>			

To
The Managing Director,
DGVCL/MGVCL/PGVCL/UGVCL
Corporate Office,
Surat/Vadodara/Rajkot/Mehsana

Sub.- New Allocation of Quantity under Feeder Level Solarization Component-C of PM-KUSUM Scheme.

Ref.- 1) MNRE's Order No.: 32/54/2018-SPV Division-Part (1) dated 20-12-2023
2) e-Sarkar file no.: GUVNL/Tech/e-file/443/2023/0541/Technical (Note no 95 to 100)

Respected Sir,

MNRE vide order dated 20-12-2023 has given sanction of additional allocation (New allocation) of 2,00,000 no. of pumps under Feeder Level Solarization Component-C of PM-KUSUM Scheme to the Gujarat State. Copy of which is enclosed herewith.

In above regard, DISCOM wise new allocation is as under;

DISCOM	No. of pumps
DGVCL	5000
MGVCL	5000
PGVCL	130000
UGVCL	60000
Total	200000

In view of above, DISCOMs are authorized to invite the RfS to select SPG and take further appropriate actions after observing all formalities, please.

This is issued with the approval of MD, GUVNL.

Thanking you.

Yours Faithfully,



(S. S. Modi)
Chief Engineer (Tech)

Encl.:- As above

Cfwcs to:-

The Director (Tech/Fin.), GUVNL, Vadodara.

32/54/2018-SPV Division-Part (1)
Government of India
Ministry of New and Renewable Energy

Atal Akshay Urja Bhavan
Lodhi Road, New Delhi 110003

Date: 12th July 2023

Office Memorandum

Subject: Amendment in the implementation guidelines of Pradhan Mantri Kisan Urja Suraksha Evam Utthaan Mahabhiyaan (PM-KUSUM) Scheme

Vide OM 32/645/2017-SPV Division dated 22.07.2019, Ministry had issued guidelines for Pradhan Mantri Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM). Vide OM of even number dated 04.11.2020, scale-up and expansion of PM KUSUM were issued. The detailed guidelines for implementation of FLS were issued vide OM dated 04.12.2020 and simplification where issued vide OM dated 14.12.2021. Further, the quantities under Component B and C were made fungible. Based on the implementation experience of PM KUSUM, it is observed that Component C is gaining traction among states, and is very important due to its universal access to agricultural feeders. Most of the pumps that are grid connected pumps are now being solarized. For carrying out bids under Component C (FLS), land was observed to be the main issue. On examination of existing arrangements being carried out by various states, it is observed that land aggregation model being implemented by Maharashtra is forward-thinking and meticulously planned. The intention is to take land on lease with commensurate lease rent for farmers, to make sure the availability of land for solar projects. Therefore, in order to facilitate the implementation of the PM KUSUM scheme and ease the process of land availability for solar power plants under Component C (FLS), the scheme is hereby modified with following modalities:

a) 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 may include an assessment of:

- Latitude/longitude of substations
- Details of agriculture load served downstream
- MW capacity installed downstream
- Details of spare bay available at LV side
- Any other requirement



b) Land Lease Rate:

Land lease rates would be announced by the state government. Currently, the state of Maharashtra offers Rs 1.25 lakhs/hectare/year for private land 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 year. The states may decide similar competitive provisions. The Government will advertise 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.

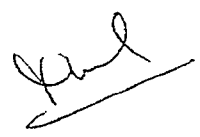
c) Development of Online portal

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 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 framers 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.

d) Modalities for leasing

- (i) 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.
- (ii) 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.



e) Provision of SPV

The DISCOMs may form an SPV which can implement the project along with arrangements for leasing the land etc.

f) 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.

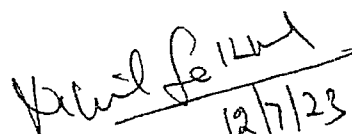
Nodal agency will inform the District Collector/District Magistrate from time to time, about the requirement of land and get in touch with the farmers to lease their land for the purpose.

g) 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, as well as to attract much creditable Solar Power Developers, 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.

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.

4. The above amendments are issued with the approval of the Competent Authority.


(Dr Nikhil Gakkhar)
12/7/23
Scientist C

To

All concerned

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

Atal Akshay Urja Bhavan
Lodhi Road, New Delhi 110003

Date: 11 September 2023

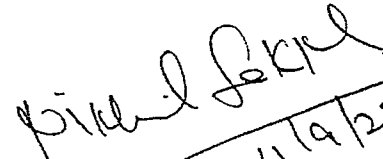
Office Memorandum

Subject: Extension of waiver of domestic content requirement (DCR) for solar cells under Component C of PM-KUSUM scheme

This is in continuation of OM of even number dated 01.08.2022 regarding issuance of extension of PM KUSUM Scheme, where condition of DCR for solar cells was waived off for projects awarded on or before 20.06.2023. The Ministry has received various representations regarding extension of DCR waiver for solar cells under Component C (FLS), owing to ongoing bidding process.

2. In view of the difficulties faced by the stakeholders and SIAs, it has been decided that the provision of requirement of indigenous solar cells (DCR) under Component C (FLS) of the PM KUSUM scheme has been relaxed till 31.03.2024.

This is with the approval of Competent Authority.


(Dr. Nikhil Gakkhar)
Scientist 'C'
PM-KUSUM Division

To,

All concerned

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.

Nirail Sekh
17/1/24
(Dr. Nikhil Gakkhar)
Scientist 'D'
011-20849115

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.

32/54/2018-SPV Division-Part (1)
Government of India
Ministry of New and Renewable Energy

Atal Akshay Urja Bhawan
Lodhi Road, New Delhi 110003
Dated: 29 Jan 2024

ORDER

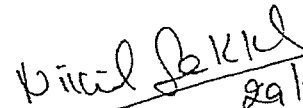
Subject: Clarification regarding Component C (FLS) of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM)

In continuation of this Ministry's Office Memorandum of even number dated 17.01.2024 regarding comprehensive guidelines for implementation of Pradhan Mantri Kisan Urja Suraksha Evam Utthaan Mahabhiyaan (PM-KUSUM) Scheme, the Ministry has received few clarifications regarding Component C (FLS) of the Scheme.

2. In this regard, it is to confirm that, the provision of requirement of indigenous solar cells (DCR) under Component C (FLS) of the PM KUSUM scheme has already been relaxed till 31.03.2024.

3. Some states have inquired about the eligible CFA under Component C(FLS). It is to be clarified that the prevailing CFA under this component, i.e. Rs 1.05 Cr/MW for General States and Rs 1.75 Cr/MW for NER/Hilly Region and Islands would be valid till any update is announced by MNRE. SIA's are requested to expediate the implementation of Scheme in the state and report progress.

This is with the approval of Competent Authority.


(Dr. Nikhil Gakkhar)
Scientist D
011-20849115

To,

All Concern

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

Atal Akshay Urja Bhavan
Lodhi Road, New Delhi 110003

Date: 14th February 2024

Office Memorandum

Subject: Clarification regarding new Comprehensive guidelines of PM KUSUM -reg.

In continuation of this Ministry's Office Memorandum of even number dated 17.01.2024 regarding comprehensive guidelines for implementation of PM-KUSUM Scheme, and Ministry's OM dated 29.01.2024, it clarified that prevailing CFA under this component would be valid till any update is announced by MNRE.

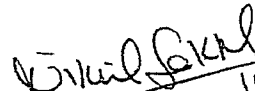
2. In view of the representation received from SIAs it is again clarified that

a) CFA of Rs 1.05 Cr/MW would be valid for all those LoAs, till any further update is announced by MNRE.

b) The DCR exemption would be valid for all those **Letter of Awards** which have been issued on or before 31.03.2024.

3. All the SIA's are requested to make a note of the above clarification and are requested to expediate the implementation of PM KUSUM Scheme. Further the progress made under each of the PM KUSUM scheme components shall be submitted, duly signed, to this Ministry on a monthly basis (Formats enclosed)

This is with the approval of Competent Authority.


(Dr. Nikhil Gakkhar)
Scientist D
011-20849115

To

All the concerned SIAs

32/54/2018-SPV Division-Part (2)
Government of India
Ministry of New and Renewable Energy

Atal Akshay Urja Bhawan
Lodhi Road, New Delhi 110003
Dated: 1st March 2024

Office Memorandum

Subject: Amendment in the Scheme guidelines under the Component C (FLS) of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM)

In continuation of this Ministry's Office Memorandum of even number dated 17.01.2024 where comprehensive guidelines for implementation of Pradhan Mantri Kisan Urja Suraksha Evam Utthaan Mahabhiyaan (PM-KUSUM) Scheme were issued, the Ministry has received requests from SIAs regarding enhancing the maximum timeline allowed for commissioning of solar power plant under Component C (FLS) of the Scheme.

2. In this regard, it has been decided to amend the scheme guidelines under the Component C (FLS) of PM KUSUM as follows:

a) The maximum timeline allowed for commissioning of solar power plant under Component C (FLS) has been increased to 18 months from date of issuance of LOA. However, the overall sanction timeline would be as per Clause 6.5(i) of scheme guidelines issued on 17.1.2024.

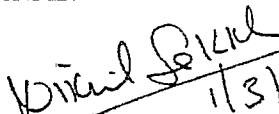
b) For the implementation under both RESCO and CAPEX mode, the CFA will be released in three instalments as follows:

- i. First release of 30% of the eligible CFA shall be released on completion of 30% of the total work.
- ii. Second release of 30% of the eligible CFA shall be released on completion of 75% of the total work; and
- iii. Final release of 40% of the eligible CFA shall be released on the successful completion of the project.

The detailed milestones to be considered as eligible for release of CFA would be notified by this Ministry separately.

c) Final instalment of 40% as per Para 2b(iii) above shall be released through DISCOM on successful operation and performance of the solar plant for six months after the commissioning, with achievement of at least one month CUF as per the minimum CUF agreed in PPA. The SIA need to submit PCR and other related documents, as prescribed by MNRE.

This order is issued with the approval of Hon'ble Minister NRE.


(Dr. Nikhil Gakkhar)
Scientist D

To,
All SIAs

Copy to:

- PS to Hon'ble Minister, MNRE
- PPS to Secretary, MNRE
- IFD, MNRE

32/54/2018-SPV Division-Part (2)
Government of India
Ministry of New and Renewable Energy

Atal Akshay Urja Bhawan
Lodhi Road, New Delhi 110003
Dated: 5 April 2024

Office Memorandum

Subject: Detailed Milestones for release of CFA under Component C (FLS) of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM) - reg

In continuation of this Ministry's Office Memorandum of even number dated 01.03.2024, vide which it was permitted to release CFA under three instalments to CAPEX and RESCO mode of installations, it was also informed that detailed milestones for release of CFA would be notified separately.

2. The milestones for the purpose of release of the CFA will be as follows:

Release	Milestone achieved	Activities to be completed by the project Developer	Release mechanism
30% of CFA as first instalment	30% of work	i) Letter of Award and signing of PPA by Project Developer with respective DISCOM. ii) Signing of EPC contract and releasing of advance to EPC contractor iii) Encumbrance free land available for project with either copy of land record with developer ownership or copy of lease agreement iv) Bay allocation letter received from DISCOM. v) ESCROW agreement, if financial assistance is obtained from FI/Banks. vi) GST invoices of solar module inverters and transformer. vii) Financial Closure of the project viii) 50% completion of preliminary civil work including foundation for module mounting structure etc.	The 30% CFA would be released to DISCOMs on submission of documents duly verified and signed by DISCOMs The DISCOM shall transfer the CFA to the RPG/Developer

30% of CFA as second instalment	75% of work	i) Completion of preliminary civil work including foundation for module mounting structure etc. ii) Receipt of Solar PV Module and Solar Inverters, at the project site. iii) 75% completion of installation work of solar PV modules	The second instalment would be released to the DISCOM The DISCOM would transfer the funds to lender/financier in case the project is under financing, otherwise release to RPG/Developer.
40% of CFA as final instalment	100% of work	a) Instalment of 25% shall be released through DISCOM on completion of the plant commissioning b) 15% on successful performance of the solar plants for two months after the commissioning, with achievement of at least one month CUF as per the minimum CUF agreed in PPA.	The final instalment would be released to the DISCOM. The DISCOM would transfer the funds to lender/financier in case the project is under financing, otherwise release to RPG/ Developer.

3. The admissible service charges of the DISCOM shall be released to DISCOM during final instalment.

This order is issued with the approval of Competent Authority

Nikhil Gakkhar
5/4/24
(Dr. Nikhil Gakkhar)
Scientist 'D'

To
All SIAs of Component C (FLS)

Copy to

- PA to Hon'ble Minister, NRE
- PPS to Secretary
- PS to JS (Solar)
- Concerned File

F. No.: 32/54/2018-SPV Division
Government of India
Ministry of New and Renewable Energy

Block no. 14, CGO Complex,
Lodi Road, New Delhi -110003
Date: 21 August 2024

Office Memorandum

Subject: Extension for installation of Solarization of Agricultural Feeders Pump under Component-C (FLS) of PM-KUSUM Scheme.

With respect to the cited subject, this is to inform you that the Ministry has sanctioned a total of 3,00,000 solar pumps under Component-C (FLS) of PM-KUSUM to the state of Gujarat during FY 2022-23. Vide letter dated 27.06.2024, the SIA has requested the extension of project awarded their four DISCOMs.

2. In view of the status of ongoing work, the Competent Authority has approved the extension of the sanctioned project to Gujarat as given below:

State	Implementing Agency	Sanction no. & date	Allocated number of pumps	Extension awarded
Gujarat	GUVNL	32/54/2018-SPV Division dated 18.05.2022	39332	31.12.2025
		32/54/2018-SPV Division dated 05.08.2022	260668	31.12.2025

3. The SIA is requested to make a note of the above and are requested to expedite the implementation of PM KUSUM Scheme. The extension of the projects is subject to milestone-based progress, as per Scheme guidelines, and non-satisfactory progress may lead to cancellation of the allocation.

4. The SIA is requested to provide the details of allocation given to State DISCOMs for reconciliation, if any.

This is issued with the approval from the Competent Authority:


(Dr. Nikhil Gakkhar)
Scientist-D

To,
Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhavan,
Race Course,
Vadodara 390 007

 GUVNL	Gujarat Urja Vikas Nigam Limited	
	Sardar Patel Vidyut Bhavan, Race Course, Vadodara: 390 007	
	CIN U40109GJ2004SGC045195	An ISO 9001:2015 Certified Company Phone: 0265-2311797
No : GUVNL/Tech/ Solar Cell/PM-KUSUM-C/FLS/ 1088		
Date : 22-08-2024		

By e-Sarkar & E-mail

To,
 The Managing Director
 Corporate Office,
 DGVCL/MGVCL/PGVCL/UGVCL
 Surat/ Vadodara/ Rajkot/ Mehsana.

Sub.: Extension for installation of Solarization of Agricultural Feeders Pump under Component-C (FLS) of PM-KUSUM scheme.

Ref.: MNRE's OM No. F.No.:32/54/2018-SPV Division dated 21-08-2024

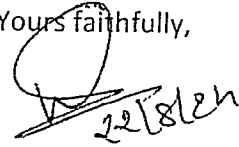
Respected Sir,

With reference to the above, please find enclosed herewith the Office Memorandum vide no. F.No.:32/54/2018-SPV Division dated 21-08-2024, issued by the MNRE, GoI, regarding extension of validity of sanction for (i) solarization of 39332 Nos. of existing agriculture pumps vide Sanction No. F.No.:32/54/2018-SPV Division dated 18-05-2022 and (ii) solarization of 260668 Nos. of existing agriculture pumps vide Sanction No. F.No.:32/54/2018-SPV Division dated 05-08-2022, up to 31-12-2025 under Component-C Feeder Level Solarization of PM KUSUM Scheme.

This is for further appropriate actions after observing all the formalities, please:

Thanking you.

Yours faithfully,



(S. S. Modi)
 Chief Engineer (Tech)
 GUVNL

Encl.: As Above

CFWCs to:-

- The Managing Director, GUVNL, Vadodara.
- The Director (Fin.), GUVNL, Vadodara

	Gujarat Urja Vikas Nigam Limited		
	Sardar Patel Vidyut Bhavan, Race Course, Vadodara: 390 007		
	CIN U40109GJ2004SGC045195	An ISO 9001:2015 Certified Company Phone: 0265-2311797	
No : GUVNL/Tech/ Solar Cell/PM-KUSUM-C/FLS/ 557			Date : 22-04-2024

By e-Sarkar & E-mail

To,
The Chief Engineer (Project)
Paschim Gujarat Vij Co. Ltd.
Corporate Office,
Rajkot.

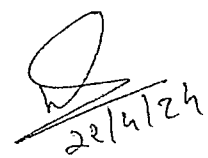
Sub:- Ratification of Draft Amendment-5 in TN-10 tender under the Component-C Feeder Level Solarization of PM-KUSUM Scheme.

Ref:- (1) PGVCL's e-mail dated 12-04-2024
(2) e-Sarkar file No. : GUVNL/Tech/e-file/443/2023/0541/Technical
(Note no. 108 to 119 Business Committee approval)

With reference to PGVCL's e-mail dated 12-04-2024 regarding to ratify the changes incorporated in Draft Amendment-5 in TN-10 tender, it is to inform that the Competent Authority of GUVNL has ratified the same, subject to following conditions;

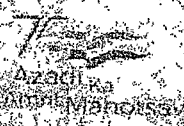
- (i) The following paragraph is added in the Sr. no. 1 to 6, mentioned in Amendment-5 :
"However, if the available period between the date of LoA and 19-12-2025 is less than 12 months, the bidder has the option to withdraw their bid without any implications on either side."
- (ii) The new proposed clause J.7 regarding Debarment from participation along with undertaking in this regard as mentioned in Amendment-5 is to be removed.

This is for information and to further convey the same to other DISCOMs from your end for uniform implementation under intimation to this office, please.


 (S S Modi)
 Chief Engineer
 (SRT & PM KUSUM)

CFWCs to:-

- The Director (Tech/Fin.), GUVNL, Vadodara

 GUVNL	Gujarat Urja Vikas Nigam Limited		 Azadi Ka Amrit Mahotsav
	Sardar Patel Vidyut Bhavan, Race Course, Vadodara: 390 007		
	CIN: U40109GJ20043GC045195 An ISO 9001:2015 Certified Company Phone: 0265-2311797, Fax No. 0265-2327483		
No.: GUVNL/Tech/ PM-KUSUM-C/FLS/ 1326			Date: 15-10-2024

By e-Sarkar & E-mail

To
 The Managing Director,
 DGVCL/MGVCL/PGVCL/UGVCL
 Corporate Office,
 Surat/Vadodara/Rajkot/Mehsana

Sub.: New Allocation of Quantity under Feeder Level Solarization Component-C of PM-KUSUM Scheme.

Ref.: 1) MNRE's Order No.: 32/54/2018-SPV Division dated 20-08-2024
 2) e-Sarkar file no.: GUVNL/Tech/e-file/443/2023/0541/Technical (Note no. 127 to 141)

Respected Sir,

MNRE vide order dated 20-08-2024 has given sanction of fresh allocation (New allocation) of 1,00,000 no. of pumps under Feeder Level Solarization Component-C of PM-KUSUM Scheme to the Gujarat State. Copy of which is enclosed herewith.

In above regard, DISCOM wise tentative allocation is as under:

DISCOM	No. of pumps
DGVCL	20000
MGVCL	40000
PGVCL	40000
Total	100000

In view of above, as approved by the Authority, DISCOMs are authorized to invite the Rfs to select SPG for the above allotted total quantity of fresh sanction in line with the procedure followed/adopted in last tenders, considering the quantity to be finalized or already finalized in last invited tenders by respective DISCOMs and take further appropriate actions after observing all formalities, please;

DISCOM-wise sanction-wise allocation for total 7,25,000 pump sets (including above fresh allocation of 1,00,000) is summarized as under for ready reference;

DISCOM	Sanctioned wise allocation					Total allocation
	2nd sanction dated 18-05-2022 : 39332 Nos.	3 rd sanction dated 05-08-2022 : 260668 Nos.	4 th sanction dated 15-09-2023 : 125000 Nos.	5 th sanction dated 20-12-2023 : 200000 Nos.	6 th sanction dated 20-08-2024 : 100000 Nos.	
1	2	3	4	5	6	7=(2+3+4+5+6)
DGVCL	2021	13396	0	5000	20000	40417
MGVCL	453	3000	0	5000	40000	48453
PGVCL	29973	198639	115984	130000	40000	514596
UGVCL	6885	45633	9016	60000	0	121534
Total	39332	260668	125000	200000	100000	725000

This is for information and needful after observing all the formalities, please.

Thanking you.

Yours Faithfully,

(S. S. Modi)

Chief Engineer (Tech)

Encl.:- As above

Cfws to:-

The Director (Fin.), GUVNL, Vadodara

203

32/54/2018-SPV Division
Government of India
Ministry of New and Renewable Energy

Atal Akshay Urja Bhavan
Lodhi Road, New Delhi 110003
Date: 20 August 2024

ORDER

Subject: Sanction of additional allocation and cancellation of existing quantities under Pradhan Mantri Kisan Urja Suraksha Evan Uthaan Mahabhiyaan (PM KUSUM)

With reference to additional demand / slow progress of states / quantities offer to surrender under different components of PM KUSUM Scheme and based on the approval of the Screening Committee the following capacities are Allocated/ Withdrawn / Surrender with respect to issued sanctions to State Implementing Agencies/Electricity Distribution Companies (DISCOM) under different Components of PM KUSUM Scheme:

i) Component A

S. No.	State	Sanction No	Sanctioned (MW)	Surrendered (Nos.)	Revised Allocation (MW)
1	Arunachal Pradesh (APEDA)	32/54/2018-SPV Division dated 23.01.2023	2	2	NIL

ii) Component B (Revised sanction)

S. No.	SIA & sanction	Sanctioned	Surrendered (Nos.)	Revised Allocation (Nos.)
1.	DNRE, Haryana (sanction dated 23.01.2023)	55000	55000	NIL
2.	KREDL, Karnataka (sanction dated 13.01.2021 and amended dated 25.01.2024)	1900	854	1046
3.	ANERT, Kerala (sanction dated 13.01.2021)	100	92	8
4.	IWRD, Mizoram (sanction dated 01.01.2024)	1000	1000	NIL
5.	OREDA, Odisha (sanction dated 13.01.2021)	5000	1800	3200
6.	TSRECO, Telangana (sanction dated 30.08.2022)	400	400	NIL
7.	DOA, Uttar Pradesh (sanction dated 23.01.2023)	30000	9000	21000

iii) Component B (Fresh allocation)

S. No.	State	Approved Allocation (Nos)
1.	Karnataka (KREDL)	15000
2.	Maharashtra (MEDA)	50000
3.	Maharashtra (MSDCL)	50000

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iv) Component C (IPS) (Fresh sanction)

S. No.	State	Approved Allocation (Nos)
1	Uttar Pradesh (UPNEDA)	10000

v) Component C (FLS) (Revised sanction)

S. No.	State	Sanction No	Sanctioned (Nos)	Surrendered (Nos)	Revised Allocation (Nos)
1	Haryana (DHBVN)	32/54/2018-SPV Division dated 21.06.2021	32459	19560	12899

iv) Component C (FLS) (Fresh allocation)

Sr. No.	State	Approved Allocation (Nos.)
1	Gujarat*	100000
2	Karnataka*	179588
3	Madhya Pradesh (MPUVN)	150000
4	Rajasthan*	100000

*State needs to provide the DISCOM-wise bifurcation, if any.

2. The project commissioning timeline shall be as mentioned in the Guidelines for implementation of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan issued vide order no. 32/645/2017-SPV Division dated 17.01.2024 and amendments thereof. SIAs/Discoms shall submit progress reports and completion reports on the online portal/emails for PM-KUSUM Scheme.

3. SIAs/ Discoms shall follow all the terms and conditions stipulated in the Guidelines of the above mentioned Scheme issued vide Order no. 32/645/2017-SPV Division dated 17.01.2024 and amendments thereof.

4. SIAs/ Discoms shall follow updated specifications and testing procedures for the solar photovoltaic water pumping system and universal solar pump controller laid down by MNRE and amended from time to time.

5. SIAs/ Discoms shall carry out various activities as mentioned under Section on Responsibilities of State Implementation Agency under PM KUSUM Scheme.

6. SIAs/ Discoms shall be liable for recovery of the whole or part amount of the CFA, with applicable penal interest, in case of non-compliance of the provisions of the Scheme/Sanction.

7. In terms of Rule 230 (7) of GFR 2017 and instructions of DoE, SIAs/ Discoms shall record the receipt of incentives and the expenditure therefrom in the EAT module of PFMS.

[Signature]

8. In terms of the Rule 230 (1) of GFR, concerned SIA/ Discom(s) will certify that they have not obtained or applied for grants for the same purpose or activity from any other Ministry or Department of the Government of India or State Government.

9. In terms of provisions contained in Rule 236(i) of GFR 2017, the account of concerned SIA/Discom(s) shall be open to inspection by the sanctioning authority and audit (both by CAG of India and Internal Audit by the Principal Accounts Office of the MNRE), whenever the organization is called upon to do so.

10. SIAs/ Discoms will furnish year wise Utilization Certificate (UC) in the prescribed format of GFR-12(A) and Audited Statement of Expenditure (ASoE) along with detailed progress report periodically as per provisions of the scheme.

11. As per Rule 234 of GFR-2017, the sanction has been entered at S. No. 20 & Page No. 5 in the Expenditure Register of this Division.

12. This issues with the approval of Competent Authority


(Dr. Nikhil Galkhar)
Scientist-D
011-20849115

To

Concerned SIAs/ DISCOM / SNAs of PM-KUSUM Scheme

Copy to:

1. Principal Director of Audit, Scientific Dept., DG, ACR Building, IP Estate, N. Delhi
2. AG, CW & M.II (Science Audit), AGCR Building, New Delhi
3. Pay and Accounts Officer, MNRE
4. IFD, MNRE
5. Sanction folder



सत्यमेव जयते

अजय यादव, भा.प्र.से.
AJAY YADAV, IAS



ITUWTSA
NEW DELHI 2024

संयुक्त सचिव
भारत सरकार
नवीन और नवीकरणीय ऊर्जा मंत्रालय
JOINT SECRETARY
GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY

D.O. No. 32/10/2021 SPV Division

Dated: 25th October 2024

Dear Sir/Madam,

The Ministry of New and Renewable Energy is implementing the PM-KUSUM scheme with the twin aim of solarizing agriculture and enhancing farmers' incomes. Your kind attention is invited to Component C of the PM KUSUM scheme, which also deals with Feeder-Level Solarization (FLS). The scheme provides support for the solarization of agricultural feeders, which ensures daytime electricity for farmers and reduces the state subsidy burden.

2. The scheme guidelines permit an overall timeline of 24 months for the completion of the project from the date of sanction, wherein, 18 months are provided from the date of LOA within the overall timeline. The scheme sunset date is 31 March 2026. During the last review meeting held on 09.10.2024, it has been observed that the activities under Component C (FLS) of the PM KUSUM Scheme need to be expedited. All PPAs under the allocated sanctions should be signed by 31st December 2024. This would allow the projects to be finished within the timeframe. The SIAs should also intensify the installation work of existing projects, where PPAs have already been signed.

3. In case, where the tenders have not been finalised so far, the same may be communicated to the Ministry by 30th November 2024 so that the unutilized quantity can be allocated to those states where installations are going on.

5. Considering the approaching deadline for PM KUSUM scheme, I request your kind intervention in expediting the implementation of the Scheme and ensuring that the objectives are achieved within the given time frame.

Yours Sincerely,

(Ajay Yadav IAS)
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To
All CEO/MD/Directors
State Implementing Agency/DICOM/SNA under Component C of PM KUSUM

Copy to

- Principal Secretary (Energy/Agriculture) of the states
- PSO to Secretary, MNRE