

(To sign in Non-Judicial Stamp Paper not less than Rs. 100/-)

"AGREEMENT"

This Agreement made onday (.....) of **Oct., 2018** between **Manipur Renewable Energy Development Agency (MANIREDA)**, a society/agency incorporated under the Manipur Societies Registration Act, 1980, having its Registered Office at *2nd Floor, South Block, Secured Office Complex, A.T.Line, Near Imphal Hotel, Imphal – 795001, Phone: 385-2421594* (hereinafter referred to as the **MANIREDA** which expression shall include its administrators, successors, executors and permitted assigns) of the one part and **M/s**, having its Registered Office at, India [hereinafter referred to as the **"Empanelled Firm"** which expression shall include its administrators, successors, executors and permitted assigns] of the other part.

WHEREAS MANIREDA desirous of implementation of supply, erection, testing and commissioning including warranty, operation & maintenance for 5 years of grid interactive rooftop solar PV power plant of various capacities in the State of Manipur at different private / residential/social/institutional/Commercial sites in Manipur against its EOI No. **5/SPP/RT/MANIREDA/2018-19**, dated **9.8.2018** AND WHEREAS **M/s** had participated in the above referred bid vide their Proposal No. Aug., 2018 and awarded the Empanelment to **M/s** on terms and conditions of the documents referred to therein, which have been acknowledged by the Firm resulting into an "Agreement".

NOW THEREFORE THIS DEED WITNESSETH AS UNDER:

1.0 Article

1.1 Rates for different categories :

Type	Category	Benchmark Cost (Rs.)
Grid connected rooftop solar PV system (Rs/Wp)	Above 1 kWp to 10 kWp	60 / Wp
	> 10 - 100 kWp	55 / Wp
	> 100 - 500 kWp	53 / Wp

MANIREDA has empanelled M/s for the work of supply, erection, testing and commissioning including warranty, operation & maintenance for 5 years of grid interactive rooftop solar PV power plant of various capacities in the State of Manipur at different private / residential/social/institutional/commercial sites in Manipur on the terms and conditions contained in its EOI 5/SPP/RT/MANIREDA/2018-19, dated 9.8.2018 and the documents referred to therein. The terms and expressions used in this Agreement shall have the same meaning as are assigned to them in the 'Documents' referred to in the succeeding Article.

2.0 Documents:

2.1 The Empanelment shall be performed strictly for a period of 1(One) year from the date of sanction of MNRE i.e. 20-9-2018 as per the terms and conditions stipulated herein and in the following documents attached herewith (hereinafter referred to as "Documents").

- i) MANIREDA's EOI Document issued vide its letter No. EOI 5/SPP/RT/MANIREDA/2018-19, dated 9.8.2018 consisting of Invitation to Bid, Instructions to Bidders, General Terms & Conditions and Special Terms & Conditions (Volume-I).
- ii) MANIREDA's Technical Specifications vide its Bid Document No. EOI 5/SPP/RT/MANIREDA/2018-19, dated 9.8.2018.
- iii) Do's and Don'ts, if any.

iv) Security Deposit

Security Deposit amounting to Rs 3,00,000/- is to be deposited after signing this Agreement within 10 days, by Demand Draft in favour of Director, MANIREDA or Earnest Money Deposit (Rs 3.00 lakhs by Demand Draft) shall be adjusted as Security Deposit. Security Deposit shall be released on completion of the project. If any of the firms do not implement the work after empanelment of the channel partner by MANIREDA or incomplete in execution of work orders, this amount of Security Deposit shall be forfeited without further notice to the firm.

v) Target allocation to the firm:

- a. Fresh channel partners shall be allocated for installation of 100 kWp capacity,
 - b. Already registered channel partners of MANIREDA shall be allocated for installation of 200 kWp capacity
- each under MNRE, GoI, capital subsidy category of 70% of benchmark cost within 31st March 2019. Any change in benchmark cost by MNRE shall be affected from time to time. Installation of additional capacity from the allocated target can be carried out by the firms with prior approval of MANIREDA. Extension from 31st March 2018 shall be strictly reviewed/re-examined on the performance of the execution of the work.
- vi) Responsibility to be taken up by the firms in making the consumers understand the pros and cons of the grid connected solar power plants on the rooftops of their buildings.

All the aforesaid documents shall form an integral part of this agreement, in so far as the same or any part conforms to the Bid Document. For the sake of brevity, this agreement alongwith its aforesaid Documents shall be referred to as the 'Agreement'.

3.0 Conditions & Covenants:

- 3.1 Based on this Agreement, the Promoters/Beneficiaries shall issue **work order** to the empanelled firm of their choice in a standardized Format provided by MANIREDA wherein the following terms and conditions shall be incorporated:

The scope of work, Consideration, Terms of payment, Taxes wherever applicable, Insurance, Liquidated Damages, and all other terms and conditions as contained in MANIREDA's EOI No. EOI 5/SPP/RT/MANIREDA/2018-19, dated 9.8.2018 in conjunction with other aforesaid documents. The work shall be duly performed by the Firm strictly and faithfully in accordance with the terms of this Agreement and work order issued by the Promoter.

4.0 Quality Plans:

- 4.1 The Firm is responsible for the proper execution of the Quality Plans. MANIREDA will undertake quality 'surveillance and quality audit of the Firm's works, systems and procedures and quality control activities. A Materials Inspection Clearance Certificate (MICC) for each household installed will be issued by the Scheme Officer, MANIREDA after a joint inspection of equipment with the Firm's representative and Scheme Officer/Representative, MANIREDA. The Firm further agrees that any change in the Quality Plan will be made only with the MANIREDA's approval. The Firm shall also perform all quality control activities, inspection and test agreed with the MANIREDA to demonstrate full compliance with the Work requirements.
- 4.2 It is expressly agreed to by the Firm that the quality tests and Inspection by the MANIREDA shall not in any way relieve the Firm of its responsibilities for quality standards, and performance guarantee and their other obligations under the Agreement.
- 4.3 This Agreement constitutes full and complete understanding between the parties and terms of the present. It shall supersede any prior correspondence, terms and conditions contained in the Agreement. Any modification of the Agreement shall be effected only by a written instrument signed by the authorized representative of both the parties.

5. Time Schedule/Schedule Date of Completion:

If the work is not completed within three (3) months from the date of issue of the Work Order by the consumer/Promoter or if the materials are kept in the consumers premises and did not execute the work within the period, then, the work order will be cancelled and execution of the work by the defaulted firm, in other consumers work, will be withhold until further verification. Any firms who do not adhere to the terms and conditions laid down in the Work Order may even be liable to be de-empanelled from the channel partnership of MANIREDA.

6. Technical Specifications:

MNRE specification as prescribed in the bid document and Dos and DON'Ts prescribed by MANIREDA as annexed below.

7. Terms of Payment:

Empanelled firms will have to receive orders from the purchaser (registered with MANIREDA) on the rates not higher than the approved rate by MANIREDA and will get central subsidy as under :-

- 8.1 Subsidy shall be released on submission of the project completion report after successful installation, commissioning of the grid connected solar power plant including injection of surplus power into the grid, all the installed system conforming the technical specification specified by MNRE and the DO's and DON'T's prescribed as under. The payment, however, is subject to release of CFA from MNRE. The following mandatory information is to be furnished :
- Details of the module & PCU/Inverter utilization report of SPP installed as specified in Proforma-9 of Bid Document.
 - Certificate of installation & commissioning of SPP received by the consignee as specified in Proforma - 7.

- Confirmation from DISCOM on interfacing with grid connectivity.
- Verification of Certificate of Commissioning from the beneficiary countersigned by officer concerned.
- Photographs along with details of module, inverter/PCU etc. installed at site in soft copy (CD/DVD).

8.2 All payments shall be released by MANIREDA through account Payee Cheque issued in favour of the Promoter/ Consumer or e-payment through RTGS/account transfer as the case may be.

8.3 5% of the total contract value shall be treated as Performance Guarantee during the 5(five) years performance warrantee and maintenance period and shall be paid against satisfactory performance of the Solar PV Power Plant. This amount shall be paid by the purchaser in 5 equal annual installments, starting from completion of one year from the date of Commissioning at site. The firm shall have to submit annual performance & functionality report to Purchaser and MANIREDA for the release of annual payments.

9. Security of the Power Plant & Materials/Equipment:

The security of the power plant and equipment will rest with the Firm during supply, execution of installation & commissioning work until the plant is handed over fully to the consumer. MANIREDA shall, in no case be held responsible for any loss, damage or theft of materials/equipment of the power plant etc. Any loss, damage or theft of materials/equipment must be replaced by the Firm during this period. (i.e. the period during the custody of Firm).

10. Maintenance & Performance Warranty Contract (MPWC):

A Maintenance & Performance Warranty Contract (MPWC) shall be comprehensive which shall include servicing & replacement guarantee for parts and components (like module, Inverters, ACDB, DCDB, Meters, Cables etc.) of Solar Power Plant for 5(five) years. The date of MPWC period shall begin from the date of actual commissioning of the Solar Power Plant.

The Maintenance & Performance Warranty Contract (MPWC) shall be as described below:

- i) The firm should maintain the power plant **every four months** and a maintenance and performance report of the Plant should be submitted to MANIREDA by 15th of the next month. Format of the performance report will be provided by MANIREDA. All preventive/routine maintenance and breakdown/corrective maintenance required for ensuring maximum uptime shall have to be provided.
- ii) The Contractor should keep a technician permanently (present round the clock) at the **Service Centre** for accepting day to day troubleshooting, maintenance etc. from the consumer during the MPWC period. The deputed personnel /technician of the Firm at the service centre shall be qualified and well trained so that he can handle any type of operational hazards quickly and timely. He should also be in a position to check and test all the equipment regularly, so that, preventive maintenance & repair, if required, could be taken well in advance to save any equipment from damage. Qualification certificate of the technician shall be submitted at the time of signing of the Agreement.
- iii) The deputed personnel of the Firm at the Solar Power Plant shall maintain and record the import and export energy data (from the meter) in a Record/Log Book of the plant. **If the Firm fails to submit the performance report of the Power Plant within the stipulated 15 days, penalty @Rs. 500/- shall be imposed for every month delayed.** This amount will be deducted during the release of MPWC Charges.
- iv) **Any fault/defect occurred on the plant shall be intimated by the consumer to the Firm as well as MANIREDA within 24 Hours. Any minor fault should be rectified within seven days or major fault like Inverter, Panels replacement etc within 15 days from the date of report by the consumers. Action taken report should be submitted to MANIREDA as soon as the fault is rectified. Penalty of the amount of the units generated during the shutdown period shall be imposed if the Firm fails to rectify the fault within the stipulated time mentioned.**
- v) The Firm will bear the cost of all consumables, spare parts and repairing expenses during the MPWC period.
- v) During operation and maintenance period, if there is any loss or damage of any equipment/component of the power plant due to mishandling/mismanagement or due to other reasons, whatsoever, the Firm shall be responsible for replacement/rectification. The damaged component may be repaired, if it is understood after examination that after repairing, the

performance of the component shall not be degraded, otherwise the defective component shall have to be replaced by new one without any extra cost.

11. Completion Report:

The Firm shall submit 2(two) copies of Completion Report to MANIREDA , both in Hard and Soft copies wherein the details of equipment such as Serial Nos. of the SPV modules, Inverter, ACDB, DCDB, quarterly meter reading both export and import etc. and also details of civil construction, cabling etc. alongwith photographs of the systems installed.

12. Servicing Centre & After Sales Service and Availability of Spare Parts:

The Firm shall establish a Repairing and Servicing Center at the State Capital with adequate spares during the MPWC period in order to carry out the MPWC effectively. Minimum stock of supply of spare parts/consumables of the Power Plant shall be readily available at the Servicing Centre all the time. The Supplier shall provide satisfactory and uninterrupted services during the guarantee/MPWC period for which a servicing centre must be established at Imphal. Address, contact number etc. of the Servicing centre must be submitted within fifteen days from the date of issue of Work Order. Name, address, telephone number of the Servicing Center, daily working hours etc. must be clearly printed in the Manual for easy service.

13. Warranty:

- i) The mechanical structures, electrical works including power conditioners /inverters / distribution boards /digital meters / switchgear etc. and overall workmanship of the SPV power plants /systems must be warranted against any manufacturing /design /installation defects for a minimum period of 5 years from the date of commissioning.
- ii) PV modules used in solar power plants /systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years. Warranty Card of all components supplied (SPV modules, Inverter, Meters etc.) must be provided to the consumer and MANIREDA. It must indicate the Sl. No., Model No., Make, Year of manufacturing etc. for every component.

14. Liquidated Damage:

The completion period for the assignment must carefully be worked out and all resource & work planning is to be done accordingly with flexibility for adjustments.

- (i) If the Supplier fails in the due performance of the contract to deliver and commission any part of the equipment or complete the work within the scheduled date for any reason other than due to Force Majeure conditions or any extension thereof granted to him by MANIREDA, he shall be liable to pay to MANIREDA as pre-agreed liquidated damages but not by way of penalty on account of delayed successful commissioning, a sum equal to 0.1% of total contract/work value per week of such delay, or part thereof, subject to maximum of 5% of the Total Contract/work Value.
- (ii) The liquidated damages for delayed completion shall be recovered from the Supplier's Bill.
- (iii) Deductions/payment of liquidated damages shall in no way relieve the Supplier from his contractual responsibility to complete the works.

15. Arbitration:

- (i) All disputes or differences, whatsoever, arising between the parties out of or in relation to the construction, meaning and operation or effect of this contract or breach thereof shall be settled amicably.
- (ii) If, however, the parties are not able to resolve them amicably, the same shall be settled by arbitration in accordance with the Rules of Arbitration of the Indian Council of Arbitration and Conciliation & Arbitration Act 1996 and the award in pursuance thereof shall be binding on the parties.
- (iii) The venue of arbitration proceeding shall be within Jurisdiction of Court of Law at Imphal only.
- (iv) Work under this contract shall be continued by the Supplier during the arbitration proceedings, unless otherwise directed in writing by MANIREDA or unless matter is such that the work cannot possibly be continued until the decision of the Arbitrator is obtained.

16. Force Majeure:

- (i) Should at any time during the continuance of the contract the performance in whole or in part of any obligations by either party under this contract be held up by reasons of any war, hostility, acts of foreign enemy, civil commotion, sabotage, fires, floods, earthquakes, explosions, epidemics, cyclones, quarantine restrictions, Governmental regulations, law & order and other proclamation etc. (hereinafter referred to as "Events") then, provided notice of the happening of any such eventuality is given by either party to the other within 15 days from the date of occurrence thereof neither party shall, by reasons of such eventuality, be entitled to terminate this contract, nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and the work under this contract shall be resumed as soon as practicable after such eventuality has come to an end or ceased to exist.
- (ii) Should one or both the parties be prevented from fulfilling their contractual obligations by a state of force majeure, lasting continuously for a period of at least four (4) weeks, the two parties should consult each other regarding the further implementation of the contract.
- (iii) The above-mentioned force majeure conditions/clause shall also apply in the works of sub-contractors/suppliers of the contractor.
- (iv) However, the Contractor shall not be liable for liquidated damages or termination/cancellation of order/contract if and to the extent that its delay in performance or other failure to perform its obligations under the contract is the result of an event of force majeure.

17. Cancellation of the Contract/work:

The promoter/consumer will be at liberty to terminate in part or full the awarded contract/work without prejudicing its rights and affecting the obligations of the Firm by giving seven (7) days notice in writing in the following events:

- (a) If the Firm is found defaulter for delayed supply or failure to deliver satisfactory performance or supply of substandard materials pursuant to NIB conditions.
- (b) If the Firm fails to comply with the provision(s) of the contract including the responsibilities to fulfill the 5 years maintenance and performance warrantee contract as per the provisions mentioned in this bid document.
- (c) If the Firm is involved in any action of moral turpitude.
- (d) If few parts are supplied and did not execute the work **within three months** from the date of issue of the work order, then the work order will be cancelled and the defaulted firm shall not be allowed to execute any further implementation work without verification.

DO's AND DON'Ts

Sl. No.	Particulars	Details
1.	Solar PV Module Nos. / Make / Serial No. of PV Modules	Indigenously manufactured PV modules of capacity not lesser than 250 Wp per panel
2.	Inverter, Make, capacity and serial No.	Grid tied inverter should be field proven, after sales service centres for easy replacement of the inverters, warrantee period should be not less than five years. Inverter should comply with IEC 61683/IS 61683 for efficiency and Measurements and should comply IEC 60068-2 (1, 2, 14, 30) / Equivalent BIS Standard for environmental testing.
3.	Energy meter, Solar Meter	Utility Meter of Make Genus / Secure/L&T as per Central Electricity authority (Installation & operation of meters) Regulation 2006 as amended time to time
4.	Earthing	AC/ DC earthing as per requirement of the string
5.	Lightning Arrester and its Earthing	Spike Type with GI Strip. Height of the Arrester should be such that it can cover the entire array of modules and so preferably at the middle of the array(45 degree at the extreme panel with the top of the arrester.)
6.	Junction Boxes	The J. Boxes (JBs) shall be made of GRP / FRP / Powder Coated Aluminium /cast aluminium alloy with full dust, water & vermin proof arrangement. All wires / cables must be terminated through

		cable lugs. Conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single / double compression cable glands. Provision of earthings.
7.	Earth Resistance to be tested:	Should not be more than 5 ohms For smaller capacity power plants a minimum of two earth pits with proper capping should be there (i) DC Surge Protection, ii) AC side with Inverter
8.	Bolts, nuts, fasteners, panel mounting clamps	Stainless steel SS 304 with plane and spring washer
9.	For capacity above 5 kWp, earthing for structures should also be made separately	Minimum of three earthing and should be properly designed as per requirement of the power plants
10.	Array structure	Hot dip galvanized MS mounting structures may be used for mounting the modules/ arrays. Minimum thickness of galvanization should be at least 120 microns. Can also use Aluminium structures that can withstand 150 km/hour Mounting arrangement for RCC-flat roofs - With removable concrete ballast made of pre-fabricated PCC (1:2:4), M15
11.	Cable	All cables shall be supplied conforming to IEC 60227/ IS 694 & IEC 60502/ IS 1554. Voltage rating: 1,100V AC, 1,500V DC - For the DC cabling, XLPE or XLPO insulated and sheathed, UV stabilised single core flexible copper cables shall be used. Multi-core cables shall not be used. - For the AC cabling, PVC or XLPE insulated and PVC sheathed single or multi-core flexible copper cables shall be used. Outdoor AC cables shall have a UV-stabilised outer sheath.
12.	A copy of the leaflet about the power plant, its specification, do's and don'ts during operation, warrantee of the systems etc. provided by the Firm to the Promoter	Should be provided

***All solar power plants should comply to latest MNRE's specification.

IN WITNESS WHEREOF, the parties through their duly authorized representatives have executed these presents (execution whereof has been approved by the competent authorities of both the parties) on the day, month and year first above mentioned at Imphal and declare that, in violation of the terms and conditions mentioned in the 'Agreement', the firms have no objection (in full sense) in

- a) Dis-qualifying from the channel partnership of MANIREDA,
- b) Forfeiting the Security Deposit of Rs. 3.00 Lakhs,
- c) Black-listing the firm.

We do hereby append our signatures in full agreement and understanding the terms mentioned above.

WITNESS

1.

(L. Manglem Singh)
Director, MANIREDA

1.

(.....)

Proprietor,

M/s

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