

# MEGHALAYA NON-CONVENTIONAL AND RURAL ENERGY DEVELOPMENT AGENCY

Near B.S.F. Camp, Mawpat, P.O. Mawpat, Shillong – 793 012

Phone No.0364-2537343/2536138#Fax No.0364-2537611

E-Mail: [mnreda.dir@gmail.com](mailto:mnreda.dir@gmail.com) Website: [www.mnreda.gov.in](http://www.mnreda.gov.in)

## NOTICE INVITING TENDER


NIT No. MNREDA/1688/2016/25

Dated Shillong, the 8<sup>th</sup> August, 2016.

Scaled tenders are invited from eligible registered Indian Manufacturers (“manufacturers” mean manufacturers of SPV modules or battery or PCU) or MNRE Channel Partners under JNNSM for the design, supply, installation, testing and commissioning of off-grid solar power plants 50 Kwp each as per MNRE guidelines and specifications, with two years warranty and three years mandatory comprehensive maintenance contract (CMC) at various locations in the State of Meghalaya.

Tender documents will be issued during working days from 09.08.2016 to 26.08.2016 in the office of the undersigned on payment of a Non-refundable processing fee of Rs. 10,000.00 (Rupees Ten Thousand) only or can be downloaded from the website of MNREDA by way of cash or bank draft only. Bank Draft should be drawn in favor of Member Secretary cum Director, MNREDA, Shillong. Tender documents shall be received in the office of the undersigned up to 29.08.2016 at 1.00 PM and shall be opened in the same place and date at 3.00 PM.

The undersigned reserves the right to cancel the tender and/or reject any or all the bids without assigning any reason thereof.


  
**Member Secretary cum Director  
Meghalaya Non-Conventional & Rural  
Energy Development Agency, Shillong.**

Memo. No. MNREDA/1688/2016/25-A

Dated Shillong, the 8<sup>th</sup> August, 2016

Copy to: -

1. P.S to the Principal Secretary,  
to the Govt.of Meghalaya, Power Department.
2. The State Informatic Officer,  
National Informatics Centre  
Meghalaya, Shillong. } With a request to display the NIT & Tender Document on the  
website. Both hard & soft copy of Tender Document enclosed  
herewith.
3. M/s. Eastern Chronicle  
Shillong. } With a request to publish in one issue of your newspaper and to be  
submitted the bill in duplicate along with sample of Advertisement for  
necessary payment.
4. Notice Board,  
MNREDA, Shillong.

  
**Member Secretary cum Director  
Meghalaya Non-Conventional & Rural  
Energy Development Agency, Shillong.**

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## **NOTICE INVITING TENDER**

**for**

**Supply, Installation and Commissioning  
of**

**Off Grid Solar Power Plants**

**At different locations in**

**The State of Meghalaya**

**For the Financial Year 2016-17**

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NIT No.: MNREDA/1688/2016/25

Dated Shillong, the 8<sup>th</sup> August, 2016

Tender document issued to M/S \_\_\_\_\_

against application vide letter No. \_\_\_\_\_

dated \_\_\_\_\_ and payment of Rs. 10,000.00 (Rupees Ten thousand) only by Cash/Bank

Draft No. \_\_\_\_\_ dated \_\_\_\_\_

Of \_\_\_\_\_ Bank towards the processing fees of Tender

Document (Part – A and Part – B),

***Issued By:***

FOR MEMBER SECRETARY CUM DIRECTOR  
MEGHALAYA NON-CONVENTIONAL & RURAL  
ENERGY DEVELOPMENT AGENCY,  
SHILLONG

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## **PART – A**

### **Commercial & Technical Bid**

# MEGHALAYA NON-CONVENTIONAL AND RURAL ENERGY DEVELOPMENT AGENCY

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## *CONTENTS*

1. Notice Inviting Tender .....	5
2. Instructions to Bidders .....	6
3. General Terms & Conditions .....	10
4. Scope of Work and Technical Specification .....	14
5. Agreement.....	22
6. Contract Performance Guarantee Format.....	24
7. Financial Bid Format .....	26

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**Member Secretary cum Director  
Meghalaya Non-Conventional & Rural  
Energy Development Agency, Shillong.**

Memo. No. MNREDA/1688/2016/25-A

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to the Govt.of Meghalaya, Power Department.

2. The State Informatic Officer,  
National Informatics Centre  
Meghalaya, Shillong.

} With a request to display the NIT & Tender Document on the website. Both hard & soft copy of Tender Document enclosed herewith.

3. M/s. Eastern Chronicle  
Shillong.

} With a request to publish in one issue of your newspaper and to be submitted the bill in duplicate along with sample of Advertisement for necessary payment.

4. Notice Board.  
MNREDA, Shillong.

**Member Secretary cum Director  
Meghalaya Non-Conventional & Rural  
Energy Development Agency, Shillong.**

## **INSTRUCTIONS TO BIDDERS**

### **Minimum Qualifying Criteria for Bidding:**

- 1.1 The bidder must have the following minimum criteria to qualify for bidding:
- (i) The bidder should be a registered Indian company / Firm registered as manufacturer of Solar Module or Battery or Electronics or MNRE Channel Partner.
  - (ii) The bidders should have their products approved by MNRE/ IEC.
  - (iii) The bidder should have an average annual turnover of Rs. 8 Crores (eight crores) in the last three years. Certified audited balance sheets for the last three years should be submitted.
  - (iv) The bidder should have cumulative experience of having executed projects worth 200 Kwp SPV Power Plants in Northeast Region preferably. Certified work orders and satisfactory completion reports from project owners should be submitted.
  - (v) The bidder must have adequate service network for maintenance of the system in North Eastern Region. Details to be furnished.
  - (vi) The bidder must have valid VAT Registration Certificate
  - (vii) The bidder should have adequate financial stability and status to meet the obligation pursuant to the scope of works. Certified copies of their profits and loss account for the last 3(three) years must be submitted alongwith the bid.

Non-submission of above documents shall result in rejection of bid.

### **2. Tender Document**

In addition to this Tender document, any other documents/ instructions/ amendments/ revisions issued by MNREDA to the bidder till the date of opening of the bid shall also be deemed to be an integral part of the bid document. Failure to furnish all the information as per the bid document in every respect shall result in rejection of the bid.

### **3. Processing Fee of Tender Document**

3.1 Tender document can be purchased from MNREDA office on payment of Non-refundable/transferrable Tender Processing Fee of Rs. 10,000/- (Rupees Ten thousand) only either by cash or Bank Draft drawn in favor of Member Secretary-cum-Director, MNREDA, Shillong.

3.2 Bidders may also download the bid document from MNREDA website and submit the processing fee of the bid document as indicated at 3.1 above in the form of Demand Draft along with Commercial & Technical Bid (Part – A ).

Non-submission of Tender Processing Fee shall result in summary rejection of bid.

#### 4. Bid Security

4.1 Bid Security of Rs.14.00 (Rupees fourteen Lakhs) only in the form of Demand Draft from any scheduled or nationalized bank of India in favor of Member Secretary cum Director, MNREDA, Shillong should be furnished along with technical & Commercial Bid without which tenders will be summarily rejected.

4.2 The bidders who claim exemption shall have to produce relevant papers from the proper authority i.e. NSIC registration certificate, etc.

4.3 Bid security shall be returned to the bidders after successful installation and commissioning of the systems.

#### 5. Submission of Bid

The bid should be submitted latest by the date and time indicated in the NIT. The bid should be submitted in 2 (two) parts i.e. Commercial & Technical Bid and Financial Bid.

5.1 **Commercial & Technical Bid:** consisting of the following documents:-

- i. Tender Paper (Part – “A”) duly signed and sealed by the Authorized person/s of the firm.
- ii. Tender Processing Fee, if downloaded or certified copy of money receipt for the tender document issued by MNREDA.
- iii. Data Sheet duly filled up and completed as per tender document.
- iv. Documents required under Minimum Qualifying Criteria for Bidding.
- v. Any deviation with justification thereof.
- vi. Any other documents as mentioned in this tender document.

5.2 **Financial Bid:** consisting of the following documents:-

- i. Tender Paper (Part – “B”) duly signed and sealed by the Authorized person/s of the firm.
- ii. Price Bid - can be quoted on plain paper but it should be in the format given.

5.3 Commercial & Technical Bid should be sealed in a separate envelope, hereinafter referred to as **First Envelope**, marked as “Commercial & Technical Bid for NIT No. \_\_\_\_\_, Name of Work \_\_\_\_\_”.

5.4 Commercial & Technical Bid should not contain price of any items otherwise the bid shall be disqualified.

5.5 Financial Bid should be sealed in a separate envelope, hereinafter referred to as **Second Envelope**, marked as “Financial Bid for NIT No. \_\_\_\_\_, Name of Work \_\_\_\_\_” along with Bidder’s name & Address.

5.6 Financial Bid should not contain any technical matter or other matter except price bid. The date of opening of the price bid will be notified to qualified bidders after Commercial & Technical bid evaluation.

5.7 First Envelope and Second Envelope should be sealed in a third envelope marked as “Technical and Financial bid for NIT No., Date of opening of tender, Name & Address of the bidding firm and should be



addressed to Director, Meghalaya Non-Conventional And Rural Energy Development Agency, Near B.S.F. Camp, Mawpat, P.O. Mawpat, Shillong – 793 012.

## **6. Opening and Evaluation of Tender**

- 6.1 On the date and time indicated in the NIT Schedule, only the outer envelope and First Envelope shall be opened. If the processing fee of the tender document and bid security are found to be in order, then the Technical & Commercial bid document shall be accepted and kept for evaluation. Otherwise, the tender document shall stand rejected and shall be returned to the bidder.
- 6.2 The bid document which is accepted shall be evaluated first as per the qualifying criteria and if Found to be qualified, the technical and commercial bid shall be evaluated.
- 6.3 If the bid document is not qualified as per the qualifying criteria, it shall be treated as non- responsive And the Technical & Commercial bid shall not be evaluated and shall be returned to the bidder.
- 6.4 Only the bidders whose Technical & Commercial bids are responsive shall be eligible for opening of the financial bids.

## **7. Opening of Financial Bid**

Date of opening of Financial Bid shall be intimated individually to those bidders who have qualified in the Technical & Commercial offer.

7.1 The price quoted should be as per format and firm and valid for 12(twelve) months from the date of opening of the price bids. The price should be quoted as per the format provided in the tender document. Price break up of various components must be clearly indicated in the format and failure to comply with the above shall result in rejection of the Bid.

7.2 The rate should be written in English, both in figures and in words. In case of any differences between the prices mentioned in figures and words, the prices mentioned in words shall be considered final. Also, in case of any arithmetical error in regard to the total amount and individual rates, the individual rates shall be taken as final and the total amount shall be calculated accordingly.

## **8. Award of Contract**

MNREDA would distribute the work to the first 3(three) lowest quoted rates i.e. L<sub>1</sub> – 50%, L<sub>2</sub>. 30% and L<sub>3</sub>-20% provided that L<sub>2</sub> and L<sub>3</sub> are willing to supply the specified items at the rates quoted by L<sub>1</sub>.

## **9. Additional Information**

Any other information which are required to be furnished as per detailed tender papers but which have not been specifically indicated.

## **10. Deviation**

Any deviations to the terms and conditions stipulated in detailed tender papers including payment terms etc. must be clearly specified if there is any deviation with justification.

## **11. Attestation**

All supporting papers (photocopies) which are not in original should be self-attested.

## **12. Other Terms & Conditions**

- 12.1 Insertion, post-script, addition and alteration shall not be registered unless confirmed by bidder's signature and stamp.
- 12.2 Incomplete tender or tenders not submitted as per requirement as indicated in the NIT shall be rejected.
- 12.3 Bidders shall submit their offer strictly as per terms and conditions of the tender document without any deviation.
- 12.4 Failure to furnish all information and documentary evidence as stipulated in the bid document or submission of an offer that is not substantially responsive to the bid document in all respects shall be summarily rejected.
- 12.5 All bids shall be received in duly sealed cover only within the due date and time. No bids shall be received after the due date and time.
- 12.6 MNREDA reserves the right to reject part or whole of the bid/order without assigning any reason thereof, postpone the date of receipt and opening of the bids or cancel the bid without bearing any liability, whatsoever, consequent upon such decision.
- 12.7 Issuance of bid documents shall not be construed that the bidders would be automatically considered qualified.
- 12.8 The Technical Data Sheet for submission of Technical Bid is given at Annexure-I. The bidder whose Technical Bid is found to be acceptable, settled and frozen shall be considered for opening of respective Financial Bids.
- 12.9 No tender will be accepted after the deadline for submission of tender mentioned in the NIT or subsequent Corrigendum (s)/Notification(s) extending the last date of receiving the tender if any.

## **GENERAL TERMS & CONDITIONS**

### **1. Signing of Tender Paper**

The Tender Document as issued by MNREDA should be signed at every page by the Authorized person of the firm and it will be viewed as acceptance of each and every conditions containing therein.

### **2. Time of Completion**

The work should be completed within 180 (One Hundred Eighty) days from the date of issue of final work order. However, the supply of all the major materials for the work like SPV modules, battery, inverter, structures, cables, etc. should be completed within 120 (One Hundred twenty) days from the date of issue of final work order, failing which the work order shall stand open to be cancelled and the Contract Performance Guarantee shall be forfeited. Recovery of the mobilization advance shall also be effected.

### **3. Agreement**

- (a) An Agreement has to be signed within 15(Fifteen) days of issue of final work order. The Agreement shall be prepared by the successful bidder in the prescribed format (**Appendix 1**) on a non-judicial stamp paper of Rs. 100.00 (Rupees one hundred) only and signed by the authorized persons of the Firm and MNREDA. The annual maintenance contract agreement shall be signed separately on completion of installation and commissioning of the system.
- (b) The successful bidder shall submit a detailed PERT Network/Barchart comprising adequate number of activities covering various key phases of the work such as design, procurement, manufacturing, transportation and field activities within fifteen(15) days from the date of letter of Award of Contract.

### **4. Warranty**

The System supplied should be under warranty for a period of **2 years** and the SPV Module for a period of **25 years** from the date of commissioning of the System.

### **5. Payment Terms and Conditions**

The Bidders shall be entitled to the following payment terms:

- (a) Mobilization Advance: The contractor shall be paid 30% (thirty percent) of the contract value as mobilization advance on application and against a Bank Guarantee of like amount from any Nationalized Bank or Scheduled Bank valid for a period of 180 (One Hundred Eighty) days from the date of acceptance of work.
- (b) 40% (forty percent) of the contract value shall be paid against receipt of materials at site and in good conditions, subject to availability of funds.

- (c) 20% (twenty percent) of the contract value shall be paid on completion and commissioning of the System, subject to availability of funds.
- (d) Balance 10% (ten percent) shall be released at the expiry of warranty period and after submission of performance report duly certified by the concerned project officer or against like amount Bank Guarantee.

## **6. Subletting of Contract**

The Contractor shall not, in whole or in part its obligation to any third party to perform the order/contract.

## **7. Contractor to Inform Himself Fully**

(a) The Contractor shall be deemed to have carefully examined the general conditions, specifications and Schedules and also to have satisfied himself as to the nature and character of the plant and equipment to be supplied and installed under the contract, the site conditions and all relevant matter and details.

(b) If he shall have any doubt as to the meaning of any portion of the contract/work order, he shall before signing/accepting it, set forth the particulars thereof and submit them to the MNREDA in writing in order to Remove such doubts.

## **8. Service Center**

It is mandatory that the bidder should have a local service center in the North Eastern Region and preference will be given to those Firms who have the service Centre in the State of Meghalaya. It will be mandatory to establish a service Centre located in the District /Sub-Division under which the work will be executed. A declaration in this regard must be attached with the Bid, failing which the Bid shall stand to be rejected.

## **9. Breach/ Cancellation of the Contract**

In case of non-performance in any form or change of the covenants and conditions in this contract by contractor, MNREDA shall have the power to **annul**, rescind, cancel or terminate the contract and upon its notifying in writing to the contractor that it has so done, this contract shall be absolutely determined. The decision of MNREDA in this regard shall be final and binding.

## **10. Responsibility of the Contractor**

The contractor shall guarantee and be entirely responsible for the execution of the contract in accordance with the specifications, schedules and appendices. He shall further guarantee and be responsible for the quality and workmanship of all materials and completed works, correct designs, drawings, correct delivery of materials, erection, testing and commissioning, within the warranty. The Bidder should submit a manufacturer's authorization letter declaring warranty of Solar Modules as per MNRE, failing which The Bid shall stand to be rejected. On completion of commissioning, a separate agreement shall have to be signed in respect of a comprehensive annual maintenance contract for a period of three years after the warranty period.

## **11. Safety Measures**

The Contractor shall have to undertake necessary measures for providing adequate safety and precautions to avoid any accident which may cause damage to any equipment/material or injury to workmen. MNREDA shall not responsible for any such accidents.

## **12. Delivery of System**

(a) The contractor shall deliver the plant/systems in accordance with the terms of the contract at the time/times at the place/places and in the manner specified in the contract. The contractor shall comply with instructions that may be given by the MNREDA from time to time regarding the transit of the plant and material.

(b) Notification of dispatch or delivery in regard to each and every consignment shall be made to the MNREDA immediately after dispatch or delivery. The contractor shall submit to the MNREDA consignee invoice in duplicate and packing account of all stores dispatched or delivered by him.

(c) In case of any occurrence of loss or damage in transit up to destination, it shall be the liability of the contractor to initiate and pursue the claim with the Insurance Company. He should take immediate steps to repair the damaged equipment or arrange a replacement thereto. Any extension of time limit required in such contingency will be considered by the MNREDA on merit.

## **13. Inspection of Material**

The material shall be dispatched by the supplier after inspection by the Director cum Member Secretary, MNREDA Project Officer(Solar). The supplier shall give 15 day's written notice of any material ready for inspection. The material shall be dispatched and erected in the project only after acceptance of the same. The installation of the work shall be carried out under the close supervision of the Project Officer, MNREDA. The final inspection after installation and commissioning shall be carried out by Project Officer(Solar), MNREDA. MNREDA can also get the systems tested by any approved test Centre/ laboratory at its own cost. Rejected material (if any) will be replaced by the supplier at its cost within a stipulated time.

## **14. Training**

Bidder shall provide necessary training at District HQ/SDO Civil Sub-Division Level for mutually agreed duration and number of persons to enable the purchaser to maintain the system free of cost. A declaration in this regard must be attached with the Bid, failing which the Bid shall stand to be rejected.

## **15. Court of Competent Jurisdiction**

The Courts of Shillong only have jurisdiction in this case.

## **16. The following details should be marked indelibly on the body of Solar Panel Module.**

- (a) Name of the Manufacturer/distinctive logo
- (b) Model or type number
- (c) Serial Number
- (d) Year of Manufacturer
- (e) Not for sale or transfer. Property of MNREDA.



## **SCOPE OF WORK & TECHNICAL SPECIFICATIONS**

### **1. Scope of Work**

The broad Scope of Work shall include the following:

- a) Design, manufacture, supply, packing and forwarding, transportation, transit insurance, installation & commissioning of Solar PV Power Plant
- b) Detailed planning of smooth execution of the project
- c) Performance testing of the complete system
- d) Warranty of the system for 2 years faultless operation.
- e) After sales service

This would inter-alia include

- a) A clear understanding of the features of the proposed project site. This may require a prior visit to the proposed site.
- b) Supply of the complete systems, including all necessary components, sub components, spares, and tools etc. as per technical specifications given elsewhere in this document.
- c) Erection and commissioning of the supplied systems on the specified site.
- d) Providing pedestals if required for mounting of the PCU'S and control panels.
- e) All structural drawings to be approved by the Project Officer Incharge, MNREDA.
- f) Any other work urgently required as per site conditions.
- g) The bidder must also provide a detailed operation and maintenance manual specific to the installed systems.
- h) Fabrications, supply and the installation of suitable support for the PV panels and other components whichever is required with the accessories.
- i) Civil work for SPV structure.
- j) SPV Power plant shall be installed as per the specifications provided in the technical offer.
- k) Provide sealed & tested energy meters at consumption side & generation side of SPV Power Plant.
- l) Provide electrochemical marking (embossing/print in indelible ink) on each solar module which will show name of manufacturer, year of manufacturing and capacity of solar module.
- m) Supply of manual for Operation and Maintenance of all the system in English or local language.
- n) Supply and installation of control equipments required for the system.
- o) Training of the user for operation and maintenance of the system.
- p) Any additional works not covered above, but necessary for the functioning of the system and required as per specification incorporated.
- q) Regarding cabling work (external & internal) the tenderer is required to visit the site and as per actual site conditions quote (including drawing & design) accordingly.
- r) Regarding actual work to be carried out at the site, tenderer needs to execute the work in consultation with the office of MNREDA.
- s) The tenderer shall provide Comprehensive Maintenance Contract (CMC) of 3 years after the end of the warranty period.
- t) The tenderer shall provide the necessary training to the identified representative approved by MNREDA during the course of 5 years of warranty and CMC periods for proper daily operation and maintenance of installed system.
- u) All cabling and load connections should be carried by the tenderer with proper synergy with the existing electrical systems of proposed project site.

## **2. General Technical Description & Configuration**

### **a. Solar PV Module**

Crystalline high power solar cells shall be used in the Solar Photovoltaic module. Each Solar module shall consist of redundantly interconnected solar cells and shall have the Peak Power rating of not less than 250Wp. To connect the solar module interconnection cable shall be provided. Module shall be made of high transmittivity glass front surface giving high encapsulation gain and silicon rubber edge sealant for module protection and mechanical support. All materials used shall have a proven history of reliable and stable operation in external applications. Solar module shall be crystalline type, employing lamination technology using established polymer (EVA) and tedlar laminate. Every Module should have “MNREDA PROPERTY- NOT FOR SALE” written in indelible ink inside Glass lamination of the Solar Module.

Solar module shall be in accordance with the requirements of IEC 61215. In addition, the modules must conform to IEC 61730 Part 1- requirements for construction & Part 2 - requirements for testing, for safety qualification or Equivalent IS.

### **b. Power Conditioning Unit**

Power Conditioning Unit (PCU) provides an un-interrupted AC power using battery power. DCDB output will be fed to PCU which mainly consists of MPPT Charge Controller, Inverter, Voltage Stabilizer and distribution panel along with necessary Displays, Indicators and Alarms. The power conditioning unit shall convert DC Power by SPV modules and store in battery bank. Power Conditioning Unit (PCU) should preferably conform to IEC standards or equivalent BIS standards.

The PCU in addition to battery charging during sunny hours also feed the loads from SPV Power Plant. The Solar Photovoltaic Power Plant shall cater to the electricity demand as per the proposed hours or duration per day. The system shall have the provision of charging battery bank through mains as well. It should be designed such that during sunny hours the loads are fed from SPV Power Plant in addition to battery charging. If the power produced from the Power Plant is not sufficient to feed the loads then the balance power shall be fed by Battery bank. In case Battery bank is not sufficiently charged, then the balance energy can be drawn from the Utility Grid. The Power Plant shall provide a reliable and independent power supply at a voltage and frequency levels to suit the grid voltage and frequency.

The power conditioning unit should be an integrated unit comprising MPPT solar charger.

### **c. Battery Bank**

- The batteries should be AGM- VRLA/Tubular Gel.
- The batteries shall use 2V cells and capacity to be designed for C10 rate.
- Suitable carrying handle may be provided.
- A suitable battery rack with interconnections & end connectors shall be provided to suitably house the batteries In the bank.
- The batteries shall be suitable for recharging by means of solar modules via incremental / open circuit regulators.



- Battery interconnecting links shall be provided for interconnecting the battery in series and in parallel as needed.
- Connectors for inter cell connection (series / parallel) shall be maintenance free. Insulated terminal Covers shall Be provided.

**d. Module Mounting Structure**

The Module Mounting structure is to be manufactured with Mild-steel angles, Sheets, Mesh & channels preferably spray/Hot dip Galvanized. These structures are to be designed for suitable mounting on RCC structure on Rooftop / Ground. These structures are to be designed to withstand wind up to 150 Km/hr. from backside of the panels, as per specific requirement at Site. The structures should be designed for either fixed tilt or with provision for seasonal adjustment to maximize the power generation. The structures should be compatible for on roof and on ground installation as well.

**e. ACDB and DCDB**

AC Distribution Board/ Isolator Box:

- An ACDB shall be provided in between PCU and Loads.
- It shall have MCB of suitable rating for connection and disconnection of PCU from load.
- It shall have MCB to supply power to loads such as computer, lighting loads and power plug sockets.

DC Distribution Board:

This shall consist of MCCBs of suitable specifications & which can withstand the required flow of dc current. The option for isolating the battery bank & SPV arrays should be made. Best quality Ah meter shall be installed to measure the cumulative charging & discharging status of battery bank.

**f. Earthing & Lightning Arrestor**

Earthing Protection:

The structure of the PV Module shall be grounded properly using adequate number of earthing kits. All metal casings/ shielding of the plant shall be thoroughly grounded to ensure safety of the power plant.

Lightning Arrestor:

The SPV power plant shall be provided with lightning and over-voltage protection. The main aim of this protection will be to reduce the over-voltage to a safe value before it reaches the PV or other sub-system components. The source of over-voltage can be lightning, atmospheric disturbances, etc.

**g. Remote Monitoring:**

All the relevant parameters of PCU should be available for remote monitoring over the internet using GPRS based monitoring solution.

<b>Inverter</b>	
Switching Element	
Controller	
Nominal Output Voltage	
Output Supply Phase	
Output Waveform	
Nominal Frequency	
Load Power Factor	
Nominal Output Current (A)	
Voltage regulation	
Voltage Stability in dynamic condition	
<b>Parameters</b>	<b>Specification</b>
Output Voltage distortion with 100% linear load (%)	
Overload at nominal output voltage for 10 minutes	
Overload at nominal output voltage for 1 minutes	
System peak efficiency	
Noise @ 1 meter (dBA $\pm$ 2dBA)	
Enclosure protection degree with open doors	
Cooling	
Galvanic Isolation	
<b>Protection</b>	
<b>Display Parameter</b>	
<b>Operating Temperature (°C)</b>	
<b>Max. Relative Humidity</b>	

**PREAMBLE:**

Contract for design, supply, manufacturing inspection, packing and forwarding, transportation, installation & commissioning of \_\_\_\_\_(Name of Work) at \_\_\_\_\_ location in the State of Meghalaya.

This contract made this \_\_\_\_ day of \_\_\_\_\_ Two Thousand Sixteen at Shillong.

**BETWEEN**

Meghalaya Non-Conventional and Rural Energy Development Agency (MNREDA) having its office at Near BSF Camp, Mawpat, Shillong-793012, East Khasi Hills District, Meghalaya, India, hereinafter referred to as the "PURCHASER" which term or expression unless excluded by or repugnant to the context or the meaning thereof, shall be deemed to includes its successors and permitted assigns, **OF THE ONE PART,**

**AND**

M/s \_\_\_\_\_ having its office at \_\_\_\_\_ Hereinafter referred to as "Supplier" which term or expression unless excluded by or repugnant to the context or meaning thereof shall be deemed to include its successors and permitted assigns), **OF THE OTHER PART,**

**AND WHEREAS**

- a. The PURCHASER has decided to get the work of supply, installation and commissioning of \_\_\_\_\_ (name of Work) at \_\_\_\_\_ location in the State of Meghalaya.
- b. The SUPPLIER has declared that he has valuable specialized knowledge and expertise of Manufacturer, Shop Testing, packing, Forwarding, Transportation, Transit Insurance, Supply, Installation, Testing and Commissioning of Solar Photovoltaic power Plant Systems.
- c. The Supplier has obtained clarifications on technical and commercial aspects, inspected the site and generally all matters incidental thereto and ancillary thereof, affecting the execution and completion of the job, and
- d. The SUPPLIER has agreed to undertake the aforesaid work as per the Specifications and the terms and conditions of the PURCHASER.
- e. The SUPPLIER has accepted the tender of the SUPPLIER for the aforesaid work and on the basis of above declarations of the Supplier, has decided to enter into this agreement with the SUPPLIER.

**NOW IT IS HEREBY AGREED AND DECLARED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:**

**Article-1**

1.1 In consideration of the total contract price of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) only and as per details specified in Purchase Order to be paid by the PURCHASER to the SUPPLIER for scope of work and services the SUPPLIER hereby covenants with the PURCHASER to perform the work detailed in Purchaser Order and Technical Specification.

1.2 Subject to the provisions of this contract, completion of the work within the stipulated time is the essence of the contract. The SUPPLIER shall arrange to effect deliveries of the materials, facilities and other services under this contract within the time schedule and in such manner that the completion of all items of work shall be synchronized in such a way that the overall schedule of the various items specified in the contract is observed and adhered to.

1.3 Notwithstanding the approval accorded by the PURCHASER to the appointment of any sub-Suppliers including those which may be specified in the contract, the SUPPLIER shall be solely responsible for the completion of the work as per specifications and within the time schedule agreed in this contract. Approval of any sub-Supplier by PURCHASER shall not relieve SUPPLIER from any of his liabilities or obligations under the contract and he shall be responsible for the acts, defaults and neglects of any sub-Supplier as fully as if they were the acts, defaults or neglects of SUPPLIER

Article-2

The contract price is inclusive of all applicable charges, insurance, freight, TOT, Octroi, Excise Duty, Professional Tax, VAT and all the other taxes and duties.

Article-3

This contract shall come into effect from the date of Purchase Order.

Article-4.

In case of any failure in the due performance of the contract to deliver any part of the equipment or complete the work within the time fixed under the contract or any extension thereof granted to him by MNREDA and to fulfill his obligations in time under the contract, he shall be liable to pay MNREDA liquidated damaged as mentioned in the Purchase Order.

Article-5

The following documents shall form and be read and construed as an integral part of this contract: Purchase Order No. MNREDA/\_\_\_\_\_.

Article-6

All notices under this contract shall be given in writing and shall be deemed sufficiently given when delivered either in person or by telegram, fax/telex or by registered mail or courier addressed to the other party at its address set forth in the preamble to this contract with a copy to the nominated representative at site.

Article-7

This contract is executed in English language.

Article-8

The contract shall be subject to the exclusive jurisdiction of the courts under the Meghalaya High Court at Shillong.

IN WITNESS HEREOF the Parties hereto by representatives duly authorized have executed the contract on the day, month and the year first above written.

Signature

Signature

For and on behalf of Supplier

For and on behalf of

Meghalaya Non-Conventional and Rural Energy development Agency.

(Seal of the office)

(Seal of the office)

In the Presence of:

In the Presence of:

1.

1.

2.

2.

**CONTRACT PERFORMANCE GUARANTEE**

(To be stamped in accordance with Stamp Act)

(The stamp paper should be in the name of issuing bank)

Bank Guarantee No.

Ref:

Date:

To,  
The Director,  
Meghalaya Non-Conventional and Rural Energy  
Development Agency (MNREDA),  
Near BSF Camp, Mawpat, Shillong-793012.

Dear Sir,

In consideration of the MNREDA Meghalaya Non-Conventional and Rural Energy Development Agency (hereinafter referred to as the (MNREDA) which expression shall unless repugnant to the context or meaning thereof includes its executers, administrators, successors and assigns) having accepted offer of Supply Installation, Testing, Commissioning (SITC) of Solar Project of (Name of Work) at \_\_\_\_\_ by \_\_\_\_\_ M/s.

\_\_\_\_\_ with its Registered/Head Office at \_\_\_\_\_ (hereinafter referred to as "Supplier", which expression shall unless repugnant to the context or meaning thereof includes its executers, administrators, successors and assigns) a contract by issue of (MNREDA) Letter of Award No. Dated \_\_\_\_\_ and the same having been unequivocally accepted by the Supplier resulting in a "Contract" bearing No. \_\_\_\_\_ for Supply Installation Testing Commissioning (SITC) of Solar Project of \_\_\_\_\_ KWp at \_\_\_\_\_ and the Supplier having agreed to provide a contract performance guarantee for the faithful performance of the entire contract equivalent to Rs. (in figure and words).

Whereas the above said Letter of Award being assigned by MNREDA Authority Signatory (hereinafter referred to as the "MNREDA", which expression shall unless repugnant to the context or meaning thereof includes its executers, administrators, successors and assigns) vide MNREDA's , letter No. dated \_\_\_\_\_ w.e.f. \_\_\_\_\_ and accepted by the Supplier, thereby requiring the Contract Performance Guarantee for the same amount to be issued in favor of MNREDA.

We \_\_\_\_\_ (Name & Address), having our Head office at \_\_\_\_\_ and Branch office at \_\_\_\_\_ (hereinafter referred to as "Bank", which expression shall unless repugnant to the context or meaning thereof includes its executers, administrators, successors and assigns) do hereby guarantee and undertake to pay promptly to MNREDA, on demand any and all monies payable by the Supplier to the extent of \_\_\_\_\_ as aforesaid at any time up to \_\_\_\_\_ (DD/MM/YYYY) without any demur, reservation, contest, recourse or protest and/or without any reference to the Supplier. Any such demand made by MNREDA on the Bank shall be conclusive and binding notwithstanding any difference between the MNREDA and the Supplier or any dispute pending before any court, tribunal or any other authority. The bank undertakes not to revoke this Bank guarantee during its currency without previous consent of the MNREDA and further agrees that the guarantee herein contained shall continue to be enforceable till the MNREDA discharges this guarantee.

The MNREDA shall have the fullest liberty without affecting in anyway the liability of the bank under this guarantee from time to time to extend the time for performance of the contract by the Supplier. The MNREDA shall have the fullest liberty, without affecting this guarantee to postpone from time to time the exercise of any powers, vested in them or of any right which they might have against the Supplier, and to exercise the same at any time any manner, and whether to enforce or to forbear or to enforce any covenants, contained or implied, in the contract between MNREDA and the Supplier or any other course of remedy or security available to the MNREDA. The Bank shall not be released of its obligation under these presents by any exercise by the MNREDA of its liberty with reference to the matters aforesaid or any of them or by a reason of any other acts of omission or commission on the part of the MNREDA or any other indulgence shown by the MNREDA or by any other matters or thing whatsoever which under law would, but for this provision, have the effect of relieving the bank.

The bank also agrees that the MNREDA at its option shall be entitled to enforce this guarantee against the bank as a principal debtor, in the first instance without proceeding against the Supplier and notwithstanding any security or other guarantee that the MNREDA may have in relation to the Supplier's liabilities.

Notwithstanding anything contained herein above our liability under this guarantee is restricted to \_\_\_\_\_ and it shall remain in force up to and including \_\_\_\_\_ and shall be extended from time to time for such period, as may be desired by M/s. \_\_\_\_\_ on whose behalf this guarantee has been given.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_ at \_\_\_\_\_

Witness. 1.

Name \_\_\_\_\_

(Signature) \_\_\_\_\_

Signature \_\_\_\_\_

Bank Rubber Stamp

Witness. 2.

Name \_\_\_\_\_

(Designation with Bank Stamp)\_

Signature \_\_\_\_\_

Attorney as per  
Power of Attorney No. \_\_\_\_\_

# **MEGHALAYA NON-CONVENTIONAL AND RURAL ENERGY DEVELOPMENT AGENCY**

**Near B.S.F. Camp, Mawpat, P.O. Mawpat, Shillong – 793 012**

**Phone No.0364-2537343/2536138#Fax No.0364-2537611**

**E-Mail: [mnreda.dir@gmail.com](mailto:mnreda.dir@gmail.com) Website: [www.mnreda.gov.in](http://www.mnreda.gov.in)**

## **PART – B**

### **Financial Bid**

**PART –B**  
**FINANCIAL BID**

**NIT No.:**

**Date Shillong, the**

<b>Sl. No.</b>	<b>Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price (Rs.)</b>	<b>Total Price (Rs.)</b>
1.	SPV Modules with all accessories				
2	Battery with all accessories				
3	Inverter with all accessories				
4.	Structures				
5.	Balance of System*				
	Sub-total - A				
6.	Transportation & Insurance				
7.	Civil & Electrical works				
8.	Installation & Commissioning				
	Sub-total - B				
9.	Comprehensive Maintenance for 3 (three) years.				
	Grand Total				

(Rupees \_\_\_\_\_  
\_\_\_\_\_ Only)

**Note** : 1. The prices quoted above are complete in all respect as per Technical Specifications and inclusive of all Central/State/Local taxes & duties, packing, forwarding, transit insurance, loading & unloading, transportation & other charges etc.

2. Certified that rates quoted are as per specifications, terms & conditions mentioned in the bid document.

3. \* Balance of System includes balance of materials as per specifications and Data Sheets to make the System operational.

Date:

Signature of Tenderer with Company seal.

Place: