

# **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**

**for**

**60W LED BASED STREETLIGHTS AT MAWPHLANG**

**Meghalaya**

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NIT No.: MNREDA/1638/2015/109

Date Shillong, the 28<sup>th</sup> October, 2015.

Tender document issued to M/S

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

dated \_\_\_\_\_ and payment of Rs. 5,000.00 (Rupees Five thousand) only by

Cash/Bank Draft No. \_\_\_\_\_ dated

\_\_\_\_\_ of \_\_\_\_\_ Bank to-

wards the cost of Tender Document for 60 W LED Based Streetlights at Mawphlang.

***Issued By:***

For Member Secretary cum Director  
Meghalaya Non-Conventional & Rural  
Energy Development Agency

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## **PART – A**

### **Commercial & Technical Bid**

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**NOTICE INVITING TENDER**

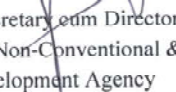
No. MNREDA/1638/2015/109

Dated: Shillong, the 28<sup>th</sup> October 2015

Sealed tenders are invited from eligible registered Indian Manufacturers (manufacturers mean manufacturers of SPV modules or battery or PCU or White LED-based luminaires) and MNRE Channel Partners for the design, supply, installation, testing and commissioning of 60 W LED-based Streetlights at Mawphlang, with two years warranty and three years mandatory comprehensive maintenance contract (CMC).

Tender documents will be issued during working days from 28.10.2015 to 6.11.2015 in the office of the undersigned on payment of Rs. 5,000.00 (Rupees five thousand) only in cash or bank draft or can be downloaded from website of MNREDA. 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 6.11.2015 at 12.00 PM and shall be opened in the same place and date at 3.30 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

### **NOTICE INVITING TENDER SCHEDULE**

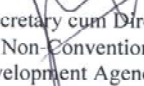
No. MNREDA/1638/2015/109

Dated: Shillong, the 28<sup>th</sup> October 2015

Name of Work:

"Design, manufacturing, shop testing, packing & forwarding, transportation, transit insurance, on-site demonstration, supply, installation, testing & commissioning, including 2 (Two) Years Warranty and 3 (Three) years Mandatory Comprehensive Maintenance Contract (CMC) of 25 Nos. of 60 W LED Based Solar Street Lighting Systems (SSLs) at Mawphlang, Meghalaya.

60 W White LED Based Solar Streetlights	Estimated Amount (Rs. in lakhs)	Bid Security (Rs.)	Date & Time of Submission	Date & Time of Opening
	25.00	50,000.00	6 <sup>th</sup> November 2015, 1200hrs	6 <sup>th</sup> November 2015, 1530hrs

  
Member Secretary cum Director  
Meghalaya Non-Conventional & Rural  
Energy Development Agency

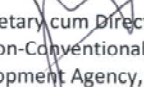
Memo. No. MNREDA/1638/2015/109 (A)

Dated: Shillong, the 28<sup>th</sup> October 2015

Copy to :-

1. The State Informatic Officer,  
National Informatics Centre  
Meghalaya, Shillong.
2. M/s. Eastern Chronicle  
Shillong.
3. Notice Board.  
MNREDA, Shillong.

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

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

## **INSTRUCTIONS TO BIDDERS**

### **1. 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/Joint Venture/MNRE Channel Partner/Individual registered as manufacturer of Solar Module or Battery or PCU or White LED-based luminaires.
- (ii) The bidders should have their products approved by MNRE/IEC.
- (iii) The bidder should have an average annual turnover of **Rs. One 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 similar projects equal to the bid capacity. Certified work orders and satisfactory performance 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.

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. Cost of Tender Document**

3.1 Tender document can be purchased from MNREDA office on payment of Tender cost of Rs. 5,000/- (Rupees Five thousand) only either by cash or Bank Draft drawn in favour of Director, MNREDA, Shillong.

3.2 Bidders may also download the bid document from MNREDA website and submit the cost 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 cost of Tender document shall result in summary rejection of bid.

#### **4. Bid Security**

4.1 Bid Security as indicated in the NIT Schedule in the form of Bank Guarantee/Call Deposit/FDR from any scheduled or nationalized bank of India pledged in favour of Member Secretary-cum-Director, MNREDA, Shillong should be furnished 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 issue of final work orders.

#### **5. Submission of Bid**

The bid should be submitted latest by the date and time indicated in the NIT Schedule. 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. Cost of Tender document, 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”.

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”.
- 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 “56 W LED Based Solar Street Lighting Systems (SSLs) at Mawphlang, Meghalaya” along with 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 cost 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 nonresponsive 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 firm and valid for 6 (six) 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 as 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**

The Contract shall be awarded to the lowest (L1) bidder and the bidder shall inform acceptance of the award within 3 (three) days from the date of issue of the work order failing which the work shall be offered to the next lowest bidder at the L1 rate.

## **9. Contract Performance Guarantee (CPG)**

- (i) The successful bidder shall furnish a Contract Performance Guarantee @ 10% of the bid amount quoted in the form of Bank Guarantee/Call Deposit/FDR within 7 days from the date of the award of the Contract. The Contract Performance Guarantee should be valid for a period of one year initially and may be extended if required. The format for the CPG is given at Appendix II.
- (ii) The Contract is liable to be cancelled if the successful bidder fails to furnish the Contract Performance Guarantee within the prescribed time.

## **10. Additional Information**

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

## **11. 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.

## **12. Attestation**

All supporting papers (photocopies) which are not in original should be duly attested by a gazetted officer/notary.

## **13. Other Terms & Conditions**

- 13.1 Insertion, post-script, addition and alteration shall be confirmed by the bidder's signature and stamp.
- 13.2 Incomplete tender or tenders not submitted as per requirement as indicated in the NIT shall be rejected.
- 13.3 Bidders shall submit their offer strictly as per terms and conditions of the tender document.
- 13.4 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.
- 13.5 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.
- 13.6 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.

- 13.7 Issuance of bid documents shall not be construed that the bidders would be automatically considered qualified.

## GENERAL TERMS & CONDITIONS

### 1. Signing of Tender Paper

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

### 2. Time of Completion

The work should be completed within **60 (sixty) 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 **30 (thirty) days** from the date of issue of final work order, failing which the work order shall stand cancelled and the Contract Performance Guarantee shall be forfeited. Recovery of the mobilization advance shall also be effected.

### 3. Agreement

An Agreement has to be signed within 10(ten) days of issue of the 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.

### 4. Warranty

The System supplied should be under warranty for a period of **2 years** and the SPV Module for a period **of 10 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 the work.
- (b) 30% (forty percent) of the contract value shall be paid against receipt of materials at site and in good condition, subject to availability of funds.
- (c) 30% (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.

### 6. Contract Performance Guarantee

6.1 The bidder shall submit the Contract Performance Guarantee (CPG) @ 10% of the bid amount within 7 (seven) days from the date of award of the Contract. The Contract Performance Guarantee should be valid for a period of one year initially and may be extended if required.

6.2 In the event of the contractor not being able to supply or to carry out the work or a part of the work assigned to him in accordance with the terms of this contract, the Contract Performance Guarantee shall be forfeited. Further, MNREDA shall have the right to recover any sums advanced to the contractor as mobilization advance.

#### **7. Subletting of Contract**

The Contractor shall not, without the prior consent in writing of the MNREDA, assign or sublet or transfer his contract, or a substantial part thereof other than raw materials or any part of the work of which makers are named in the contract, provided that any such consent shall not relieve the contractor from any obligation, duty or responsibility under the contract.

#### **8. 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 system and equipment to be supplied and installed under the contract, the site conditions and all relevant matters.
- (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.

#### **9. Service Center**

It is mandatory that the bidder should have a local service centre in the North Eastern Region and preference will be given to those Firms who have the service centre in the State of Meghalaya.

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

In case of non-performance in any form or change of the covenants and conditions in this contract by the 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.

#### **11. 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. 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.

#### **12. 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 equip-

ment/material or injury to workmen. MNREDA shall not responsible for any such accidents.

### **13. 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.

### **14. Inspection of Material**

The material shall be dispatched by the supplier after inspection by the Director-cum-Member-Secretary, MNREDA or his representative. The supplier shall give 7 day's written notice of any material ready for inspection. The material shall be 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, MNREDA. MNREDA can also get the systems tested by any approved test centre/ laboratory. Rejected material (if any) will be replaced by the supplier at its cost within a stipulated time.

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

Any dispute shall be referred to the Courts of Shillong which shall have absolute jurisdiction to entertain and try the case.

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

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

The Scope of Work shall include the following:

- a) Design, manufacture, supply, 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) All structural drawings to be approved by the Project Officer Incharge, MNREDA.
- e) Any other work urgently required as per site conditions.
- f) The bidder must also provide a detailed operation and maintenance manual specific to the installed systems.
- g) Fabrications, supply and the installation of suitable support for the PV panels and other components whichever is required with the accessories.
- h) Provide electrochemical marking (embossing) on each solar module which will show name of manufacturer, year of manufacturing and capacity of solar module.
- i) The word "IREDA" should be embossed on the battery box or the pole wherever suitable.
- j) Supply of manual for Operation and Maintenance of all the system in English or local language.
- k) Supply and installation of control equipments required for the system.
- l) Training of the user for operation and maintenance of the system.
- m) Any additional works not covered above, but necessary for the functioning of the system and required as per specification incorporated.
- n) Regarding actual work to be carried out at the site, tenderer needs to execute the work in consultation with the office of MNREDA.
- o) The successful bidder shall provide Comprehensive Maintenance Contract (CMC) of 3 years after the end of the warranty period.
- p) The successful bidder 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.

## 2. Technical Specifications

Technical Specifications	
Design:	
The design has to comply with all the desired lighting parameters as projected below:	
Light Out put	White colour (colour temperature 5500°-6500° K) > 4800 Lumens with the design criteria to achieve the following lighting parameters:
	a. Average lux level > 15 Lux.
	b. Uniformity factor > 0.6
	c. Transverse uniformity > 0.4
	d. Maintenance factor = 0.85
Duty Cycle	Dust to dawn under average daily insolation of 4.5 kWh /Sq.m./Day on a horizontal surface.
Wind speed resistance of system	150 Km/Hr
ELECTRONICS	
Luminaire	The Luminaire height should be 7 metres above the ground.
Operating Voltage	12 V
Light output	>4800lumens
LED Life	>50,000 hours
Driver Life	100,000 cycles
CRI	>70
Temperature compensation for proper charging of the battery throughout the year.	
Light source	White LED type
Colour temperature of white LEDs	5500° K - 6500° K
LEDs emits ultraviolet light	Not permitted.
White LEDs make	
White LEDs model number	
White LEDs country of origin	
White LEDs technical characteristics	
LED lamp make	
LED Lenses	Peanut lenses
Total Lumen Output	80 lumen/watt when measured luminaire as whole.
System Wattage (LED + driver)	60W
Luminaire efficacy per Watt	80 lumens / watt.
Driver type	DC - DC
Driver efficiency	95%
Driver Current	≤ 400 mA
Luminaire housing	Aluminium pressure die-cast housing.
Ingress Protection	IP 65



Luminaire arm	Powder coated.
Luminaire arm Length	Maximum 1.5 Meters
Luminaire arm Tilt	Maximum 15degrees
The light output from the white LED light source should be constant throughout the duty cycle.	
Dimming facility	100% for first 6 hours, 40% dim for next 6 hours.
Applicable Standard.	IEC 60598-2-3&IS 10322
LM 79 report for Luminaire	To be submitted
<b>SPV MODULE</b>	
The PV module (s) capacity	2 x 140 Wp (12V System)
A PV module test report from authorized test centre.	Required
A valid test certificate of the company for module qualification as per prevailing IEC or BIS standards for any of the modules manufactured by that company.	Required
The manufacturer should certify that the submitted module is also manufactured using same design and process.	Required
The operating voltage corresponding to the power output mentioned above	16.4 V
Warranty	10 years
SPV module(s)frame structure	Metallic with corrosion resistance paint.
LM80 report for White LED Chip	To be submitted
Applicable Standard.	IEC 61215 (revised) certification.
Material Structure of Solar Cell	Poly-crystalline silicon solar cells
VOC open circuit voltage	21.0 V under standard testing condition (STC).
Minimum Power at Vmax	2 X 140 Wp
Cell efficiency	14%.
Country of manufacture	India
Mounting frame	Metallic (with corrosion resistance paint)
<b>BATTERY</b>	
Make (as per test report)	
Type of Battery	Tubular GEL (T - GEL)
Capacity	2 x 12V, 100Ah.
Permitted depth of discharge	At least 75 % of the rated capacity of the battery.
Model number	
Mounting of Battery	Top
Reference of IS No.	IS 13369
Ampere hour Efficiency	90%
Watt Hour Efficiency	75%
Type Test Certificate	To be attached
Battery System Back-up	42 Hours.

<b>Battery box</b>	
Battery box material	Pre-coated Galvanised sheet of > 1.0 mm thick
Battery box protection	Powder-coating of 80 micron thickness.
Battery box support structure protection	Powder-coating of 80 micron thickness.
<b>Pole</b>	
Type	Octagonal pole with 65 micron thick galvanizing.
Height	7mtrs above Ground.
Thickness	5 mm.
Foundation nuts, bolts and templates	Bolts and Nuts. MS SAE 1018 Hot dip galvanised
Top OD	90 mm.
<b>Charge Controller</b>	
Rating	7.5A (Panel side )
Type	MPPT (Micro processor based)
Temperature compensated charging	To be provided.
Efficiency	96%
Enclosure for charge controller	IP 65
No load current	10 mA
<b>Inbuilt Protections:</b>	
Overcharge protection for battery	To be provided.
Deep discharge protection for battery	To be provided.
Reverse polarity protection for panel and battery	To be provided.
Temperature compensated charging for battery	To be provided.
Polarity	Auto resettable Circuit for Protection without using fuse.
Short circuit protection for battery	Auto resettable Circuit should be provided
LED indicators: a green light to indicate charging in progress and a red light to indicate deep discharge condition of the battery	To be provided.
<b>LED solar street lighting system</b>	
Warranty for White LED solar street lighting system (including the battery) except PV module	At least 2 years from the date of supply.

## DATA SHEET

<b>ELECTRONICS</b>	
Luminaire Height	
Operating Voltage	
Light output	
LED Life	
Driver Life	
CRI	
Temperature compensation for proper charging of the battery throughout the year.	
Light source	
Colour temperature of white LEDs	
LEDs emits ultraviolet light	
White LEDs make	
White LEDs model number	
White LEDs country of origin	
White LEDs technical characteristics	
LED lamp make	
LED Lenses	
Total Lumen Output	
System Wattage (LED + driver)	
Luminaire efficacy per Watt	
Driver type	
Driver efficiency	
Driver Current	
Luminaire housing	
Ingress Protection	
Luminaire arm	
Luminaire arm Length	
Luminaire arm Tilt	
The light output from the white LED light source should be constant throughout the duty cycle.	
Dimming facility	
Applicable Standard.	
LM 79 report for Luminaire	
<b>SPV MODULE</b>	
The PV module (s) capacity	
A PV module test report from authorized test centre.	
A valid test certificate of the company for module qualification as per prevailing IEC or BIS standards for any of the modules manufactured by that company.	
The manufacturer should certify that the submitted module is also manufactured using same design and process.	

The operating voltage corresponding to the power output mentioned above	
Warranty	
SPV module(s)frame structure	
LM80 report for White LED Chip	
Applicable Standard.	
Material Structure of Solar Cell	
VOC open circuit voltage	
Minimum Power at Vmax	
Cell efficiency	
Country of manufacture	
Mounting frame	
<b>BATTERY</b>	
Make (as per test report)	
Type of Battery	
Capacity	
Permitted depth of discharge	
Model number	
Mounting of Battery	
Reference of IS No.	
Ampere hour Efficiency	
Watt Hour Efficiency	
Type Test Certificate	
Battery System Back-up	
<b>Battery box</b>	
Battery box material	
Battery box protection	
Battery box support structure protection	
<b>Pole</b>	
Type	
Height	
Thickness	
Foundation nuts, bolts and templates	
Top OD	
<b>Charge Controller</b>	
Rating	
Type	
Temperature compensated charging	
Efficiency	
Enclosure for charge controller	
No load current	

<b>Inbuilt Protections:</b>	
Overcharge protection for battery	
Deep discharge protection for battery	
Reverse polarity protection for panel and battery	
Temperature compensated charging for battery	
Polarity	
Short circuit protection for battery	
LED indicators: a green light to indicate charging in progress and a red light to indicate deep discharge condition of the battery	
Warranty for White LED solar street lighting system (including the battery) except PV module	

# **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**

**No. MNREDA/1638/2015/109**

**Dated Shillong, the 28<sup>th</sup> October, 2015**

<b>Sl No</b>	<b>Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (Rs.)</b>	<b>Amount(Rs.)</b>
1	Supply of Components and parts required in 60W LED based Solar Street Lighting System.	<b>Nos</b>			
2	Erection of Components and parts of 60W LED based Solar Street Lighting System.	<b>Nos</b>			
3	CMC (3 Years) of 60W LED based Solar Street Lighting System.	<b>Nos</b>			
	Total				

**Rupees** \_\_\_\_\_  
\_\_\_\_\_

**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.  
4. All the materials shall be delivered within 30 (thirty) days from the date of issue of the work order.

Date:

Signature of Tenderer  
with Company seal

## AGREEMENT

### APPENDIX-I

#### PREAMBLE:

Contract for design, supply, manufacturing inspection, packing and forwarding, transportation, installation & commissioning of \_\_\_\_\_ Kwp solar photovoltaic plant systems at \_\_\_\_\_ location in the State of Meghalaya.

This contract made this \_\_\_\_\_ day of \_\_\_\_\_ Two thousand Fifteen 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 include 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 \_\_\_\_\_ Kwp Solar Photovoltaic Power Plant at \_\_\_\_\_ location in the State of Meghalaya.
- b. The SUPPLIER has declared that he has valuable specialized knowledge and expertise for 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 fulfil 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,

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 executors, administrators, successors and assigns) having accepted offer of Supply Installation Testing Commissioning(SITC) of Solar Project of \_\_\_\_\_ Kwp 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 executors, 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 executors, administrators, successors and assigns) vide MNREDA's , letter No. \_\_\_\_\_ dated \_\_\_\_\_ w.e.f. 01.01.2015 and accepted by the Supplier, thereby requiring the Contract Performance Guarantee for the same amount to be issued in favour 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 executors, 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 upto \_\_\_\_\_ (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 upto 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.

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

Name \_\_\_\_\_ Bank Rubber Stamp

Official Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name \_\_\_\_\_

(Designation with Bank  
Stamp) \_\_\_\_\_

Witness. 2.

Attorney as per

Signature \_\_\_\_\_

Power of Attorney No. \_\_\_\_\_

Name \_\_\_\_\_

Dated \_\_\_\_\_

Official Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_