

# **BID DOCUMENT**

**e-Tender for**

- (i) Design, manufacture, supply of battery, luminary, SPV module, cable, etc., including painting of pole with hardware, shifting of pole with RCC foundation, installation and commissioning of W-LED Solar Street Light installed at RDS crossing to Minuthong via New Checkon, Hapta Kangjeibung of Imphal East and Manipur Press Club.**
- (ii) 5(five) years Maintenance & Performance Warrantee Contract (MPWC).**

**NIB No. 67/2/2018/LED/SSL/MANIREDA**

**For the Year 2019-20**

**Manipur Renewable Energy Development Agency (MANIREDA)**

**(An autonomous Govt. Institution under Power Department)**

2<sup>nd</sup> Floor, South Block, Secured Office Complex, Near 2<sup>nd</sup> M.R. Gate, Imphal-Dimapur Road, Imphal-795001, Manipur.

(This tender document is having 29 pages including this page)

Cost of bid document: Rs 500/-

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## 1. Notice Inviting Bid

### Manipur Renewable Energy Development Agency (MANIREDA)

(An autonomous Govt. Agency under the Power Department)

2<sup>nd</sup> Floor, South Block, Secured Office Complex, Near 2<sup>nd</sup> M.R. Gate, Imphal-Dimapur Road, Imphal-795001  
e-mail: manireda99@yahoo.com; Website: [www.manireda.com](http://www.manireda.com)

#### NIB No. :

**67/2/2018/LED/SSL/MANIREDA**

Imphal, dated: 27.11.2019

Online tender is invited from the reputed firm as per the details given below:

| Item   | Tender No.                 | Total quantity | Cost of Tender | Earnest Money |
|--|----------------------------|----------------|----------------|---------------|
| (i) Design, manufacture, supply of battery, luminary, SPV module, cable, etc., including painting of pole, shifting of pole with RCC foundation, installation & commissioning of W-LED Solar Street Light installed at RDS crossing to Minuthong via New Checkon, Hapta Kangjeibung of Imphal East and Manipur Press Club. | 67/2/2018/LED/SSL/MANIREDA | 200 Nos.       | Rs. 500/-      | Rs. 70,000/-  |
| (ii) 5yrs Maintenance and Performance Warrantee Contract (MPWC)  |                            |                |                |               |

Tender Document can be downloaded from website: [www.manireda.com](http://www.manireda.com) / [www.manipur.gov.in](http://www.manipur.gov.in) for which the cost of Tender Document amounting Rs 500/- is to be enclosed as demand draft, in favour of Director, MANIREDA, payable at Imphal during submission of hard copy of tender, failing which, tender shall not be considered. Bidders have to upload their bid at <https://manipur.tenders.gov.in>

Bidders have to upload Bid to the aforesaid website as well as submit hard copy. Uploading of tender documents shall be up to 12.00 noon of 11/12/2019. Hard copy of bid documents and Cost of Tender document and Earnest Money shall be submitted by 12.00 noon of 13/12/2019. Hard copy of bid documents along with Cost of Tender document and Earnest Money submitted after 12.00 noon of 13/12/2019 shall not be accepted at any circumstances. The Technical bid shall be opened at 2.00 p.m of 13/12/2019. The financial bid of the technically qualified Bidders only shall be opened through e-tender, for which date & time will be informed latter.

Prospective bidders are requested to remain updated for any amendments/modifications/cancellation, etc. of the bid document, in the above mentioned website. No separate notifications will be given for such amendments/modifications/cancellation in the print media (press) or intimated to the bidders separately.

Director, MANIREDA, reserves the right to reject any or all tenders without assigning any reasons thereof.

Sd/-  
Director,  
MANIREDA

## 2. Bid Details

TENDER FORM NO :  
 ISSUED TO : M/s.....  
 TENDER FEE DETAILS : Vide Receipt No.....Dt.....  
 :DD No..... Bank.....

| Sl  | Description  | Details   |
|-----|--|---|
| 1.  | Notice Inviting Bid (NIB) No.                                      | 67/2/2018/LED/SSL/MANIREDA  |
| 2.  | Scope of work  | (i) Design, manufacture, supply of battery, luminary, SPV module, cables, etc., including painting of pole, shifting of pole with RCC foundation, installation and commissioning of W-LED Solar Street Light installed at RDS crossing to Minuthong via New Checkon, Hapta Kangjeibung of Imphal East and Manipur Press Club.<br>(ii) 5(five) years Maintenance and Performance Warrantee Contract (MPWC)<br><br>The quantity mentioned above is tentative & is subject to increase or decrease depending on the actual requirement at the time of placing order and resources available and as per discretion of MANIREDA. |
| 3.  | Place of submission of bid documents and address for communication | Manipur Renewable Energy Development Agency (MANIREDA), An autonomous Govt. Institution under the Power Deptt., 2 <sup>nd</sup> Floor, South Block, Secured Office Complex, Near 2 <sup>nd</sup> M.R. Gate, Imphal-Dimapur Road, Imphal-795001, Manipur.  |
| 4.  | Last date of uploading of bid document in the e-tender             | Date : 11 <sup>th</sup> December, 2019.<br>Time : Up to 12.00 noon<br>(e-tendering site <a href="https://manipur tenders.gov.in">https://manipur tenders.gov.in</a> )   |
| 5.  | Last date & time of submission of Hard copy of bids                | Date : 13 <sup>th</sup> December, 2019.<br>Time : Upto 12:00 noon (submission of documents after 12.00 noon will not be accepted at any circumstances).   |
| 6.  | Date & time of opening of Technical Bid                            | Date : 13 <sup>th</sup> December, 2019.<br>Time : 2.00 P.M.<br>Venue : Office of the Director, MANIREDA, 2 <sup>nd</sup> Floor, South Block, Secured Office Complex, Near 2 <sup>nd</sup> M.R. Gate, Imphal-Dimapur Road, Imphal-795001   |
| 7.  | Date & time of opening of Financial Bid                            | Financial Bids will be opened for only Technically qualified bidders.<br>Date : Will inform accordingly.<br>Time : -<br>Venue : Office of the Director, MANIREDA, 2 <sup>nd</sup> Floor, South Block, Secured Office Complex, Near 2 <sup>nd</sup> M.R. Gate, Imphal-Dimapur Road, Imphal- 795001   |
| 8.  | Cost of bid document (Non-refundable)                              | Rs 500/- in the form of D.D. favoring Director MANIREDA payable at Imphal.  |
| 9.  | Earnest Money (Refundable)   | Rs. 70,000/- in the form of D. D. favoring Director MANIREDA, payable at Imphal.  |
| 10. | Time of completion   | Within 30 days from the date of issue of work order.  |
| 11. | Validity of offer  | The offer shall remain valid up to 365 days from the due date of submission of offer.   |
| 12. | Validity of earnest money  | The earnest money shall be submitted by the bidder in the form of demand draft from any Nationalized/Scheduled bank. This demand draft shall have validity for at least 3 months.   |

### 3. Detailed Notice Inviting Bid (DNIB)

#### Manipur Renewable Energy Development Agency (MANIREDA)

(An autonomous Govt. Institution under the Power Department)

2<sup>nd</sup> Floor, South Block, Secured Office Complex, Near 2<sup>nd</sup> M.R. Gate, Imphal-Dimapur Road, Imphal-795001, Manipur

NIB No. : 67/2/2018/LED/SSL/MANIREDA

Date : 27.11.2019

Sub : (i) Design, manufacture, supply of battery, luminary, SPV module, cable, etc., including painting of pole, shifting of pole, installation and commissioning of W-LED Solar Street Light installed at RDS crossing to Minuthong via New Checkon, Hapta Kangjeibung of Imphal East and Manipur Press Club.

(ii) 5(five) years Maintenance and Performance Warrantee Contract (MPWC).

Dear Sir/Madam,

Manipur Renewable Energy Development Agency (MANIREDA), Imphal has the pleasure in inviting offers from eligible Indian manufacturers for the above work with your best binding price offer as per specifications and terms & conditions mentioned in the bid document. Salient features of the bid document are given below:

#### 1. Bid Document

1.1 This bid document comprises of total 15 chapters including proformas. In addition, any other documents/ instructions/amendments/revisions issued by MANIREDA to the bidder till the due date of opening of the bids shall also be deemed to be integral part of the bid document. Failure to furnish all the information as per the bid document in every respect will be at the bidder's risk.

#### 2. Cost of Bid Document

2.1 Bidders can download the bid document from MANIREDA website ([www.manireda.com](http://www.manireda.com)) or [www.manipur.gov.in/https://manipurenders.gov.in](http://www.manipur.gov.in/https://manipurenders.gov.in)) and submit the cost of the bid document amounting Rs 500/-, as applicable along with Technical Bid.

2.2 Bid applications without the cost of bid document will be rejected.

#### 3. Earnest Money

3.1 The bidder should submit in Technical Bid the earnest money in the form of Demand Draft from a Nationalised Bank/scheduled bank of requisite value as mentioned in chapter 2 (Bid Details).

3.2 Bidders failing to submit earnest money will be rejected.

3.3 The request for adjustment of earlier dues in place of earnest money will not be entertained.

3.4 The earnest money shall be returned to all unsuccessful bidders in technical evaluation, within three weeks.

3.5 The earnest money shall be forfeited if –

a. Any bidder withdraws his bid or resides from his offer during the validity period.

b. The successful bidder fails to furnish his acceptance of the Order within twenty days of placement of Work Order by MANIREDA.

c. The bidder fails to successfully complete the work within the stipulated time frame. Delay in completion due to extreme and unavoidable situations will have to get approved by Director, MANIREDA. This approval will also have a cut-off date by which the entire work will have to be completed.

3.6 The earnest money shall be refunded to the successful bidder after completion of the project in all respect.

3.7 **In case of claim for exemption from deposition of Earnest Money, sufficient proof in support of claim for exemption of EMD as prescribed in Govt. of India Notification is to be attached with the Bid.**

#### 4. Performance Guarantee

- 4.1 Performance warranty Bond shall be deposited by the supplier @5% of the Contract price excluding Installation & Commissioning and MPWC in the form of Bank Guarantee for 5(five) years period from the date of completion & commissioning of the project OR in case Bank Guarantee is not furnished, 5% of the Contract price excluding Installation & Commissioning and MPWC shall be retained as Performance Guarantee. If the solar components supplied fails to perform as per laid down system specifications or any deviations/compromise has been observed in the system specifications etc. the performance Warrantee deposit of the firm shall be forfeited.

#### 5. Submission of Bids:

**Bidders have to upload the document mentioned in Para 6.1 in the e-tender website (<https://manipurenders.gov.in>). Bidders shall also have to submit hard copies of the uploaded documents as well as stated at Para 6.4 & 6.5:**

- 5.1 Bidders are advised to submit their bids strictly based on the specifications, terms and conditions contained in the bid document and subsequent revisions/amendments, if any.
- 5.2 The bid shall be prepared and submitted by typing or printing in English with indelible black ink on white paper in consecutively numbered pages duly signed by the authorized signatory with company seal affixed on each page. Any part of the bid, which is not specifically signed by the authorized signatory and not affixed with company seal, shall not be considered for the purpose of evaluation.
- 5.3 Original copy of bid document, amendments/revisions to bid document, including minutes of meeting(s), issued by MANIREDA, if any, shall be signed and submitted along with the bid.
- 5.4 All the Proformas must be on the bidder's official letterhead. Any change in wording of the Proforma will lead to rejection of the bid application.
- 5.5 The offer shall contain no erasures or overwriting except as necessary to correct errors made by bidder. Such corrections, if any, shall be initialed by the person signing the offer.
- 5.6 Hard copy of Bid Document should be submitted in Hard Bond or Spiral Binding .
- 5.7 The Bid Document should have proper paging and flagging of Annexures/details .
- 5.8 Any Overwriting /illegible/erasing, etc. in the documents submitted by the firms shall not be accepted and will not be considered in the evaluation.

#### 6. Mode of Submission of Bids:

Bidders have to both upload document as well as submit hard copy as stated below:

- 6.1 The bidder shall submit/upload the scanned copies of the following documents with Digital Signature certificate in the E-tender:
- (i) Scanned copy of Tender Fee and scanned copy of Earnest Money Deposit(EMD)
  - (ii) Forwarding Letter- Proforma -1
  - (iii) Authorising letter for attending Bid Opening Meeting- Proforma-2
  - (iv) Test Reports of components like Battery, Luminary from approved/competent testing centers.
  - (vii) A statement of Cumulative experience of bidders not less than Rs. 30.0 lakhs whose work order issued in the name of the bidder in past 2 years with work order.
  - (viii) A summarized sheet of turnover certified by registered Chartered Accountant.
  - (ix) Letter of authorized dealer/service provider registered as per MVAT Act in Manipur
- 6.2. The bidder shall download the template of Price Bid/Schedule of Works/Bill of Quantity(BOQ) as mentioned in the Proforma-5 which is uploaded in the Tender in the aforesaid site ( <https://manipurenders.gov.in> ). After downloading the BOQ, the bidder shall fill their rate & quantity of the items as per BOQ, digitally signed and upload the filled BOQ in the same site.
- 6.3. The bidder need not submit BOQ/Price Bid in hard copy as done in previous tenders.
- 6.4. The bidder also must submit Hard copy of documents stated above at Para 6.1(i) to 6.1(ix) with all supporting document like copies of work orders in support of cumulative experience clearly indicating Amount and capacity of work.
- 6.5 In addition, the bidder must submit hard copy of other remaining Proformas and Annexures as listed in the Check list with supporting documents.
- 6.6 The hard copy of Technical Bid should be submitted in a sealed envelope

Superscribed "NIB No.: 67/2/2018/LED/SSL/MANIREDA (Technical Bid)", to the office of MANIREDA, addressed to Director, MANIREDA, 2<sup>nd</sup> Floor, South Block, Secured Office Complex, Near 2<sup>nd</sup> M.R. Gate, Imphal-Dimapur Road, Imphal-795001, Manipur.

This envelope should contain the following :

- (i) Cost of bid document (for the bidders who have downloaded the bid document from web site).
  - (ii) Original earnest money by Demand Draft of requisite value.
- 6.7 Technical Bid should not contain price of any item. Such cases, even if found anywhere, shall not be given any cognizance.
- 6.8 Only one copy of Technical Bid (hard copy) should be submitted.
- 6.9 The hard copy with earnest money and cost of tender document has to be submitted before 12.00 noon of 13/12/2019 and opening of technical BID will be at 2.00 P.M. of 13/12/2019.

#### **7.0 Terms & Conditions**

- 7.1 MANIREDA reserves absolute rights to distribute the total number of components required to be supplied under the NIB amongst any number of bidders, in the way it deems fit.
- 7.2 MANIREDA reserves the right to award part of the total number of components required at the rate to any of the bidders, in the way it deems fit.
- 7.3 MANIREDA reserves the right to amend the scope of work, accept or reject any or all the offers/bids, in part or in full or cancel/withdraw the invitation for bids without assigning any reasons whatsoever and in such case, the bidder/intending bidder shall have no claim arising out of such action.
- 7.4 The Bidder shall carefully check the specifications and shall satisfy himself regarding the technical requirement and completeness of the equipment/system.
- 7.5 Bidder should be capable and agreed to replace the components of the LED solar street light. MANIREDA reserves the right to award work/part of the work, to any bidders at its discretion.
- 7.6 The bidders should beforehand thoroughly familiarized with the incidental expenditures/charges on transportation, installation and maintenance expenses etc. They should also access the local conditions including prevailing law and order problems before submitting their offer. Any claim on change/ increase in the rate/price/cost of the work due to any reason will not be entertained at any circumstances.
- 7.7 It is not necessary to select the lowest quoted rate. MANIREDA reserves the right to decide the reasonable price/rate for successful implementation of the project.

#### **8.0 Price**

- 8.1 The Bidder shall quote price as per Proforma - 5. Price quoted shall be firm & binding and shall not be subject to any variation whatsoever, on any account except for statutory variation on taxes & duties during contractual completion period.
- 8.2 The price should be inclusive of GST, taxes & charges, duties, levies, etc. as on date.

#### **9.0 Authority of Person Signing the Documents**

- 9.1 Authorization letter as per Proforma - 2 with the seal of the company for the person signing the bid document or attending the bid opening meeting should be furnished.
- 9.2 A person signing the bid document or any document forming part of the bid document shall be deemed to warrant that he has authority to bind such offer/ document and if on enquiry it appears that the person signing had no authority to do so, MANIREDA may, without prejudice to other civil and criminal remedies, cancel the bid/contract and hold the signatory liable for all costs and damages.

#### **10.0 No Claim or Compensation for Submission of Tender.**

- 10.1 The bidder whose bid is not accepted shall not be entitled to claim any costs, charges, expenses and incidental incurred by him through or in connection with his submission of bid, even though MANIREDA may decide to withdraw the notice inviting bid.

#### **11.0 Eligibility and Qualification Criteria**

- 11.1 Bidder should have Test Certificate for the components of tendered such as LiFePo4 battery, Solar LED Luminary, SPV module, Cable, etc. from an approved/competent testing Centre as per requirements under the JNSM scheme of the MNRE, GOI.
- 11.2 Cumulative experience of the Bidder in executing contracts of SPV Programme (Installed & Commissioned) should be equivalent to **Rs. 30.0 lakhs** & above (Copies of work orders must be



- enclosed to support the cumulative experience). Bidder's experience should be work order awarded in the name of the bidder.
- 11.3 The Bidder should have valid GST registration certificate. A copy of latest **GSTR-3B Challan** should be enclosed.
  - 11.4 Overall Average Annual Turnover of the Company/Firm/ Corporation in the last two financial years should be at least 30.00 Lakh. This must be the individual Company's/Firm's /Corporation's turnover and not that of any group of Companies. (A summarized sheet of turnover certified by registered CA should be compulsorily enclosed)
  - 11.5 The Bidder should have registered office/authorized dealer/service network in Manipur as Per MVAT Act 2005 and for smooth execution of MPWC , in place before award of contract.
- 12.0 Validity of Offer**
- 12.1 Unless otherwise specified, the bidder shall keep his tender valid initially for a period of 365 days from the due date of submission of the offer.
- 13.0 Other Conditions**
- 13.1 Insertion, post-script, addition and alteration in Hard Copy shall not be recognized unless confirmed by bidder's signature and stamp.
  - 13.2 Incomplete tender or tenders not submitted as per requirement as indicated in the NIB are likely to be rejected.
  - 13.3 Bidders shall submit their offer strictly as per terms and conditions of the tender document without any deviation.
  - 13.4 If at any time any of the documents/information submitted by the bidder is found to be incorrect, false or untruthful, the resultant order may be summarily rejected/cancelled at the risk of the bidder.
  - 13.5 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.
  - 13.6 All bids(hard copy) will be received in duly sealed cover within the due date and time. Bids received after the due date and time is liable for outright rejection.
  - 13.7 MANIREDA 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.
  - 13.8 Attestation of various documents enclosed along with the offer must be done by a Gazetted Officer or Notary Public.
  - 13.9 The bidder must fulfill both uploading documents and submission of hard copy in the manner mentioned above.



## 4. General Terms & Conditions

### 1.0 Scope of Work

- 1.1 The Scope of work for renovation of W-LED solar street light includes design, manufacturing, shop testing, packing & forwarding, transportation, transit insurance, supply & replacement of battery, luminary, SPV module, cable, etc., including painting of pole, shifting of pole with RCC foundation, installation and commissioning of W-LED Solar Street Light installed at road median from RDS crossing to Minuthong via New Checkon (84 Nos.), inside the campus of Hapta Kangeibung of Imphal East (14 Nos.) and inside the complex of Manipur Press Club (2 Nos.) as per Bill of materials, etc. The work is also includes 5 years Maintenance and Performance Warrantee Contract (MPWC) of components complete in all respects along with one set of operational instruction cum maintenance manual (in English ) for each set as per the direction of MANIREDA. Each of the street light is having 2 x 100Wp SPV Module, Pole of 7 meter high from the ground level and 76 mm outer diameter, 1(one) 55watt LED Luminary with arm of 1.5m and Module Mounting Structure.

Details of work to be done are given below.

- i) Replacement of single luminary by 2(two) luminaries each i.e. by 200 nos. of W-LED Luminary (15 watt). The LED fixture will be fixed in opposite direction at a suitable position of each pole using 2(two) arms made of GI Pipe and fixing clamp. Details are mentioned in Technical Specification of bid document.
- ii) Replacement of single battery by 2(two) batteries i.e. by 200 nos. of LiFePo4 battery (12.8 V/30 Ah) with inbuilt battery housing per pole. Details are mentioned in Technical Specification of bid document.
- iii) Replacement 8 Nos. of SPV module (12V/100 Wp).
- iv) Painting of 100 Nos. of 7m high pole from the ground level and 76mm outer diameter with necessary hardware.
- v) Shifting and RCC foundation of 5 (five) poles in and around the existing site. Details of RCC foundation is placed in Technical Specification of bid document.
- vi) Any other tit bit job related to the operation of the LED SLS.
- vii) The LED solar street light will operate with dusk to dawn . The first 4 hours will operate with full brightness & rest of the time with lower light level with motion sensor. In case in any movement is there it senses it & glows full with full light and automatically back to lower level after some time. The total system should be installed keeping in view a good aesthetic look.

### 2.0 Opening and Evaluation of Bids

- 2.1 The Technical Bids and Financial Bids will be opened on the date and time mentioned in the tender website in the office of the **Director, MANIREDA**, 2<sup>nd</sup> Floor, South Block, Secured Office Complex, Near 2<sup>nd</sup> M.R. Gate, Imphal-Dimapur Road, Imphal-795001, Manipur. In presence of bidders or their authorized representatives who choose to attend the meeting. The representative should produce authorization letter to attend the bid opening meeting in the Proforma - 2.
- 2.2 MANIREDA, if required, may at its discretion obtain clarifications on offers by requesting clarifications from any or all the bidders at any time prior to Financial Bid opening. Such request for clarification and the response shall be in writing.
- 2.3 MANIREDA shall examine whether the bid is complete in all respects and conform to the stipulated requirement of the technical specifications and tests reports. The bid having material deviation shall be rejected as being non-responsive.
- 2.4 The Financial Bid of only those bidders, whose Technical Bid are found qualified after evaluation, will be opened and evaluated. In case of deviation in the date and time of opening of the Financial Bid from what is given in the Bid Detail, the date & time for opening of the Financial Bid will be uploaded on MANIREDA website. Bidders are requested to visit the website ([www.manireda.com](http://www.manireda.com)) regularly and keep themselves informed.
- 2.5 The prices shall be evaluated for components on the Total Price(P):- (a) Component cost including GST, insurance, transportation, etc. FOR Imphal (b) Installation & Commissioning

including GST, Labour Cess, Agency Charges, Contingency Charges, etc., (c) Painting & Shifting of poles including GST and (d) MPWC charges for 5 years period including GST.

2.6 The bidders shall be ranked L1, L2, L3 ....as per the Total Price (P). The Purchase/Tender Committee of MANIREDA will have the discretion to divide the quantity to be supplied among any number of technically qualified bidders at the approved rate. The work order will be issued subject to the acceptance of the bidders to supply at approved rate.

2.7 MANIREDA, if required, may at its discretion extend the scheduled date of opening of Financial Bid.

### **3.0 Award of Contract/Work Order**

3.1 The contract/work order shall be awarded to the bidder whose financial Bid was acceptable and who is selected by the Tender Committee of MANIREDA/Higher Tender Committee to undertake the work at the approved rate.

### **4.0 Quantity of Supply**

4.1 The quantity required as given in the Bid Details of Notice Inviting Bid is tentative and is subject to increase or decrease depending upon the actual requirement at the time of placing order and resources available.

### **5.0 Effective Date of Contract**

5.1 The effective date of commencement of execution of the order by the selected Contractor shall be the date of issue of the Purchase/Work Order whichever is earlier.

### **6.0 Contract Price**

6.1 The total contract price & rates of components and 5 years MPWC. In full should be quoted in Proforma-9. The price shall be for the total scope as defined in this document.

6.2 The income tax shall be deducted as applicable at the existing rate.

6.3 During the period of the contract, MANIREDA may order addition/deletion in quantities which the bidder shall comply. The adjustment in Contract Price shall be made at the same unit rate as per Price Schedule (Proforma-5).

### **7.0 Terms of Payment**

7.1 Application for payment shall be submitted by the Contractor to this office with details of the particulars of claim with necessary schedules/documents like Warranty document, Consignment Challan, Tax Invoice, Insurance Certificate, Test Certificates of SPV Module, Battery, Luminaries, Cables, etc.

- (i) 70% of the total work order value (excluding installation & commissioning and MPWC charges) for each bill shall be released against delivery of goods in full and good condition subject to availability of fund :-
  - a. Certificate of supply of components of LED SPV street light received by the consignee as specified.
  - b. Commercial invoice of the supply made in triplicate.
  - c. Copy of delivery challan/transportation challan/lorry receipt/tax invoice, etc.
  - d. Material Inspection & Commissioning Certificate.
  
- (ii) Remaining 30% of the contract price (excluding installation & commissioning and MPWC charges) and 100% of installation & commissioning charges shall be paid against duly verified completion report with successful installation and commissioning including execution and testing of the systems after submission of the following documents.
  - (a) Certificate of installation & commissioning and testing of components received by the consignee as specified in the Bid Document.
  - (b) Details of the SPV module, battery, luminary, etc. & utilization report of components installed as specified in the Bid Document.
  - (c) Commercial invoice of the supply made in triplicate.
  - (d) Copy of delivery challan/transportation challan/lorry receipt/tax invoice, etc.
  - (e) Verification of Certificate of Commissioning and testing by officer concerned.
  - (f) Photographs along with details of module, battery, luminary, etc. installed in soft copy (Pen Drive/CD/DVD),.
  - (g) All payments shall be released by MANIREDA through account Payee Cheque issued in favour of the Supplier/Contractor or e-payment through RTGS/PFMS/Account Transfer as

the case may be for which the following mandatory information is to be furnished:

| Name of the firm to whom payment is to be made | Name of bank | Bank address | Account Number | Type of Account | MICR Code | IFSC Code | PAN No. |
|--|--------------|--------------|----------------|-----------------|-----------|-----------|---------|
|--|--------------|--------------|----------------|-----------------|-----------|-----------|---------|

- (iii) MPWC charges shall be released on five (5) equal yearly installments on satisfactory performance. The record of performance sheet duly attested by the scheme officer shall be submitted to MANIREDA on half yearly basis, by 15th of the next corresponding month.

**8.0 Income Tax :**

- 8.1 Without prejudice to the obligations of the Supplier/Contractor under law, any Income Tax, which MANIREDA may be required to deduct by law/statute, shall be deducted at source and shall be paid to the Income Tax authorities on account of the Supplier. MANIREDA shall provide the Supplier a certificate for such deduction of tax.

**9.0 Statutory Variations in Taxes and Duties :**

- 9.1 The adjustment in the Contract Price towards imposition of new taxes or abrogation of existing taxes due to statutory variation shall be applicable only if the new tax is enacted or existing tax is abrogated within contractual delivery/execution period. For any upward variation due to enactment of new tax or abrogation of existing tax after contractual delivery/execution period, adjustment in the Contract Price shall not apply, although for any downward variation, MANIREDA shall make necessary adjustment in the rate of the items.
- 9.2 The Supplier shall bear and pay all liabilities in respect of statutory variations in taxes and duties and imposition of new taxes and duties that may be imposed after the contractual delivery/execution dates, as originally stipulated, in case the delivery dates are extended due to reasons attributable to Supplier.

**10.0 Agreement :**

- 10.1 The Supplier/Contractor(s) have to enter into an agreement within two weeks, in the office of the Director, MANIREDA in prescribed format before commencement of supply/services.

**11.0 Inspection of the Factory and Tests :**

- 11.1 MANIREDA reserves the right to inspect the manufacturer's works/factory to ascertain the capability/availability of necessary equipment & infrastructure required for manufacture of the item offered before opening of the Financial Bid of the bidders.
- 11.2 MANIREDA shall have access and right to inspect the work or any part thereof at any stage.
- 11.3 MANIREDA shall have the right to inspect and test the goods to confirm their conformity to the technical specifications after delivery of goods to consignee.
- 11.4 Successful bidder shall inform MANIREDA at least 15 days in advance of schedule dispatch.

**12.0 Dispatch Instructions:**

- 12.1 All items/components may be subjected to pre-dispatch inspection by Director, MANIREDA or its authorized representative(s) as per relative standards/provisions approved by MANIREDA before dispatch of items. Cost of inspection by officials (not more than two) would be borne by the successful bidder.

**13.0 Transit Insurance:**

- 13.1 Transit Insurance shall be arranged by the Supplier for his total supplies. In case of any damage/loss/pilferage/non-delivery during transit, the Supplier shall lodge the claim and settle the claim with the insurance agency. The Supplier shall also arrange replacement of the damaged, lost/pilfered items expeditiously pending settlement of commercial implications with insurance agency, if any, so as not to hamper the working of the system. The resultant loss if any due to failure of Supplier to comply with the above shall be to the account of the Supplier.

**14.0 After Sales Service and Availability of Spare Parts :**

- 14.1 The Supplier shall depute authorized Service Engineer within 3 days from the date of the intimation of fault, and establish sufficient inventory of spares, technicians in the State in consultation with MANIREDA to 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 before commencement of the work.

**15.0 Completion Schedule:**

15.1 The delivery of goods at FOR destination in full as per the terms and conditions of the contract/order shall be completed within **one (1) month** from the date of issue of the Work Order whichever is earlier and completion of installation & commissioning within **two (2) months** from the date of issue of work order.

**16.0 Guarantee/Warranty Period:**

16.1 The manufacturer must provide guarantee which include servicing & replacement guarantee for parts and components (such as battery, luminary, cables, etc.) for 5 (five) years and for SPV module is 25 years.

16.2 The guarantee card to be supplied with the system must contain the details of the system supplied as given in the Proforma - 3. The manufacturers can also provide additional information about the system and condition of guarantee as necessary.

16.3 Supplier/contractor shall without prejudice to any other clauses of the order repair/replace the defective parts and restore the system to satisfactory working/performance within 7(seven) days of intimation of fault without any additional cost to MANIREDA within the period of guarantee/MPWC.

**17.0 Assignment/Sub Letting/Pre Bidding Tie Up:**

17.1 The Supplier/contractor shall not assign or sub let, manufacture, shop testing, packing & forwarding, transportation, transit insurance and supply, in whole or part, its obligations to any third party to perform under the order/contract.

17.2 In the event the Supplier contravenes this condition, MANIREDA reserves the right to reject the equipment/work sub-contracted and procure the same from elsewhere at Supplier's risk and cost. The Supplier shall be solely liable for any loss or damage which MANIREDA may sustain in consequence or arising out of such replacing of the contract work.

17.3 In case, the installation & commissioning and MPWC is planned to be carried out in collaboration with other party, the bidder has to sign MoU with the party on a Non-judicial stamp paper of value not less than Rs. 100/- and submit a copy of the MoU along with the bid. The MoU shall clearly indicate division of scope of work between the prime bidder and his sub-vendor. However, the total responsibility of work will remain with the prime bidder.

**18.0 Liquidated Damages for Delay in Completion:**

18.1 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.

18.2 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 value per 3 months of such delay, or part thereof, subject to maximum of 2% of the Total Contract Value.

18.3 The liquidated damages for delayed completion shall be recovered from the Supplier's Bill/Bank Guarantee deposited as earnest money.

18.4 Deductions/payment of liquidated damages shall in no way relieve the Supplier from his contractual responsibility to complete the works.

**19.0 Cancellation of Order :**

19.1 MANIREDA will be at liberty to terminate in part or full the awarded contract without prejudicing its rights and affecting the obligations of the Contractor by giving seven (7) days notice in writing in the following events:

(a) If the Supplier is found defaulter for delayed supply or failure to deliver satisfactory performance or supply of substandard materials pursuant to NIB conditions.

(b) If the Supplier/Vendor 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 Supplier/Vendor is involved in any action of moral turpitude.

**20.0 Arbitration :**

- 20.1 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.
- 20.2 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.
- 20.3 The venue of arbitration proceeding shall be within Jurisdiction of Court of Law at Imphal only.
- 20.4 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.

**21.0 Force Majeure :**

- 21.1 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.
- 21.2 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.
- 21.3 The above-mentioned force majeure conditions/clause shall also apply in the works of sub-contractors/suppliers of the contractor.
- 21.4 However, the Supplier 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.



## 5. TECHNICAL SPECIFICATION

A standalone solar photovoltaic street lighting system (SLS) is an outdoor lighting unit used for illuminating a street or an open area. The Solar Street Lighting System consists of solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, inter-connecting wires/cables, module mounting pole including hardware and battery. The luminaire is based on White Light Emitting Diode (W-LED), a solid state device which emits light when electric current passes through it. The luminaire is mounted on the pole at a suitable angle to maximize illumination on the ground. The PV module is placed at the top of the pole at an angle facing south so that it receives solar radiation throughout the day, without any shadow falling on it. A battery is with inbuilt battery housing. Electricity generated by the PV module charges the battery during the day time which powers the luminaire from dusk to dawn. The system lights at dusk and switches off at dawn automatically.

### Bill of Materials For LED Solar Street Light

| Sl. No. | Items/Description   | Specification  | Quantity |
|---------|---|--|----------|
| 1.      | PV Module   | 12 V , 100 Wp as per Tech. Spec                              | 08 nos.  |
| 2.      | Lithium Ferro phosphate Battery (LiFePO4) with inbuilt Battery housing                | 12.8V, 30Ah as per Tech. Spec.                               | 200 nos. |
| 3.      | LED based Luminary set including Micro Controller based solar charge controller(15 A) | LED based 15 Watt LED luminary as per tech. spec.            | 200 sets |
| 4.      | Luminary arm with fitting accessories   | MS Pipe min 1m or suitable matched with the luminary cabinet | 200 sets |
| 5.      | Interconnecting Cables and Wiring materials   | 4.0 Sq. mm. as per tech. spec                                | 200 sets |
| 6.      | Painting of poles & other hardware  | L S  | 100 sets |
| 7.      | Shifting of poles with RCC foundation   |  | 5 poles  |

### Technical Specification of SPV Module

| Sl. No. | Items                                    | Description  |
|---------|--|--|
| 1.0     | Certification                            | i) IEC 61215 or IS 14286<br>ii) IEC 61730                                  |
| 1.1.    | Type Test certificate issuing authority. | NABL/ IEC Accredited Testing Laboratories or MNRE accredited test centres. |
| 2.0     | PV Cell                                  |  |
| 2.1     | Type                                     | Crystalline Silicon preferably Poly-crystalline Silicon                    |
| 3.0     | PV Module                                |  |
| 3.1     | Rating under STC                         | Minimum capacity of each <b>PV Module to be used is 100 Wp</b>             |
| 3.2     | Efficiency                               | Minimum 14%  |
| 3.3     | Fill factor                              | Minimum 70%  |
| 3.4     | Withstanding voltage                     | 1000V DC   |
| 4.0     | Glass                                    |  |
| 4.1     | Thickness                                | 3.2 mm (minimum)   |
| 4.2     | Type                                     | High transmission, low iron, tempered & textured glass.                    |
| 5.0     | PV Module Junction Box                   |  |
| 5.1     | Protection level                         | IP 65 or above   |
| 6.0     | Bypass Diode                             |  |
| 6.1     | System Voltage (V sys)                   | 1000 V dc  |
| 6.2     | Number                                   | 3 numbers (minimum )   |

|     |              |  |
|-----|--------------|--|
| 7.0 | Module Frame |  |
| 7.1 | Type         | Anodized aluminium frame   |
| 8.0 | Manufacturer | Solar Module must be manufacturing facility in India   |
| 9.0 | Warranty     | (i) Minimum warranty against workmanship 60 months from the date supply or 63 months from the date of installation whichever is earlier .<br>(ii) The manufacturer should warrant output of solar module 90% up to 10Years & 80% up to next 15 years as per MNRE specification |

### Technical Specification of Battery

| Sl. No. | Items           | Description  |
|---------|-----------------|--|
| 1.      | Standard        | Conform to the latest BIS/IEC/MNRE Specification   |
| 2.      | Type            | Lithium Ferro phosphate Battery ( LiFePO4).  |
| 3.      | Capacity        | Minimum 30 Ah at C/10 discharge rate.  |
| 4.      | Nominal Voltage | 12.8V  |
| 5.      | Warranty        | Minimum 60 months from date of installation or 63 months from the date of supply whichever is earlier. |
| 6.      | Manufacturer    | Any National/International Reputed manufacturer  |

### Technical Specification of Solar Charge Controller

| Sl. No. | Items                               | Description   |
|---------|-------------------------------------|---|
| 1.      | Standard                            | Conform to latest BIS/IEC/MNRE Specification  |
| 2.      | <b>Technical Parameter</b>          |   |
| 2.1     | Type                                | PWM/MPPT  |
| 2.2     | Rating                              | Minimum 15A or more as per Module capacity  |
| 2.3     | Nominal Voltage                     | 12V   |
| 2.4     | Efficiency                          | Min 85%   |
| 2.5     | No Load current consumption         | < 10 mA   |
| 2.6     | Dusk to dawn operating Facility     | Must be provided . The PV module itself should be used to sense the ambient light level for switching ON and OFF the lamp.          |
| 3.0     | <b>PROTECTIONS</b>                  |   |
| 3.1     | Temperature compensation            | Electronics should operate at 12 V and should have temperature compensation for proper charging of the battery throughout the year. |
| 3.2     | Battery Over charge & Dep discharge | The system should have protection against battery overcharge and deep discharge conditions.   |
| 3.3     | No load protection                  | Adequate protection is to be incorporated under "No Load" conditions e.g. when the lamp is removed and the system is switched ON.   |
| 3.4     | Short circuit                       | Fuse should be provided to protect against short circuit conditions.  |
| 3.5     | Reverse flow of current             | Protection for reverse flow of current through the PV module(s) should be provided.   |
| 3.6     | Battery Reverse Polarity            | Adequate protection should be provided against battery reverse polarity.  |
| 3.7     | Load Reconnect                      | Load reconnect should be provided at 80% of the battery capacity status.  |



|      |              |   |
|------|--------------|---|
| 3.8  | Indicators   | The system should have two indicators, green and red. The green indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged. Red indicator should indicate the battery "Load Cut Off" condition. |
| 3.9  | Workmanship  | The PCB containing the electronics should be capable of solder free installation and replacement  |
| 3.10 | Housing      | IP 65 type or must be in built with Luminary enclosure  |
| 4.0  | Warranty     | Minimum 60 months from date of installation or 63 months from the date of supply whichever is earlier   |
| 5.0  | Manufacturer | Reputed Indian conforming to above standard   |

### Technical Specification of LED Luminary

| Sl. No. | Items                      | Description  |
|---------|----------------------------|--|
| 1.0     | Standard                   | Conform to latest BIS/IEC/MNRE Specification   |
| 1.1     | Certification              | LM 79 & LM 80, IP 65 for luminary housing  |
| 2.0     | <b>Technical Parameter</b> |  |
| 2.1     | Light Source               | White Light Emitting Diode (W-LED)<br>15 Watt (Max.), W-LED luminaire, dispersed beam, soothing to eyes with the use of proper optics and diffuser   |
| 2.2     | Manufacturer of LED        | Cree/Philips/ Osram / Nichia or equivalent national /international manufacturer conform to the above standards.  |
| 2.3     | Light Output               | Multiple Light levels:<br>The lamp should have two levels of light to take care of different lighting needs during the night.<br>Minimum 16 Lux when measured at the periphery of 4 meter diameter from a height of 4 meter (at "High" illumination level). The illumination should be uniform without dark bands or abrupt variations.(Higher light output will be preferred) |
| 2.4     | Lumen per Watt             | Min 120 lm/Wp  |
| 2.5     | Colour Temperature         | The colour temperature of W-LEDs used in the system should be in the range of 5500oK- 6500oK.  |
| 2.6     | Duty Cycle                 | Dusk to dawn . The light output from the W-LED light source should be constant throughout the duty cycle   |
| 2.7     | Housing                    | The Luminaire housing should be water proof (IP 65) with inbuilt surge protection (Water Proof and Shock Proof). The housing may made of Aluminium pressure die-casting with Poly carbonate cover or equivalent having IP-65 certified.  |

|      |  |   |
|------|--|---|
| 2.8  | Heat Sink                                      | Proper heat sink is to be provided with the electronic devices .  |
| 2.9  | Ultraviolet Light                              | LEDs should not emit ultraviolet light  |
| 2.10 | Driver Ckt                                     | High efficiency DC to DC  |
|      | Efficiency                                     | Min 90%   |
| 2.11 | Life of the LED                                | Min 35000 Burning Hours corresponding to daily 12 Hrs Operation   |
| 2.12 | No Load current consumption                    | < 10 mA   |
| 2.13 | Dusk to dawn & motion Controller Compatibility | The LED luminaire must be compatible with Solar Charge controller with dusk to dawn operation & working with motion controller.   |
| 3.0  | <b>PROTECTIONS</b>                             |   |
| 3.1  | Motion controller                              | Features must be provided. The first 4 hours will operate with full brightness & rest of the time with lower light level with motion sensor. In case in any movement is there it senses it & glows full with full light and automatically back to lower level after some time |
| 3.2  | No load protection                             | Adequate protection is to be incorporated under “No Load” conditions e.g. when the lamp is removed and the system is switched ON.   |
| 3.3  | Short circuit                                  | Fuse should be provided to protect against short circuit conditions.  |
| 3.4  | Battery Reverse Polarity                       | Adequate protection should be provided against battery reverse polarity.  |
| 3.5  | Workmanship                                    | The PCB containing the electronics should be capable of solder free installation and replacement  |
| 3.6  | Warranty                                       | Minimum 60 months from date of installation or 63 months from the date of supply whichever is earlier   |
| 3.7  | Manufacturer                                   | Reputed Indian/International conforming to above standard   |

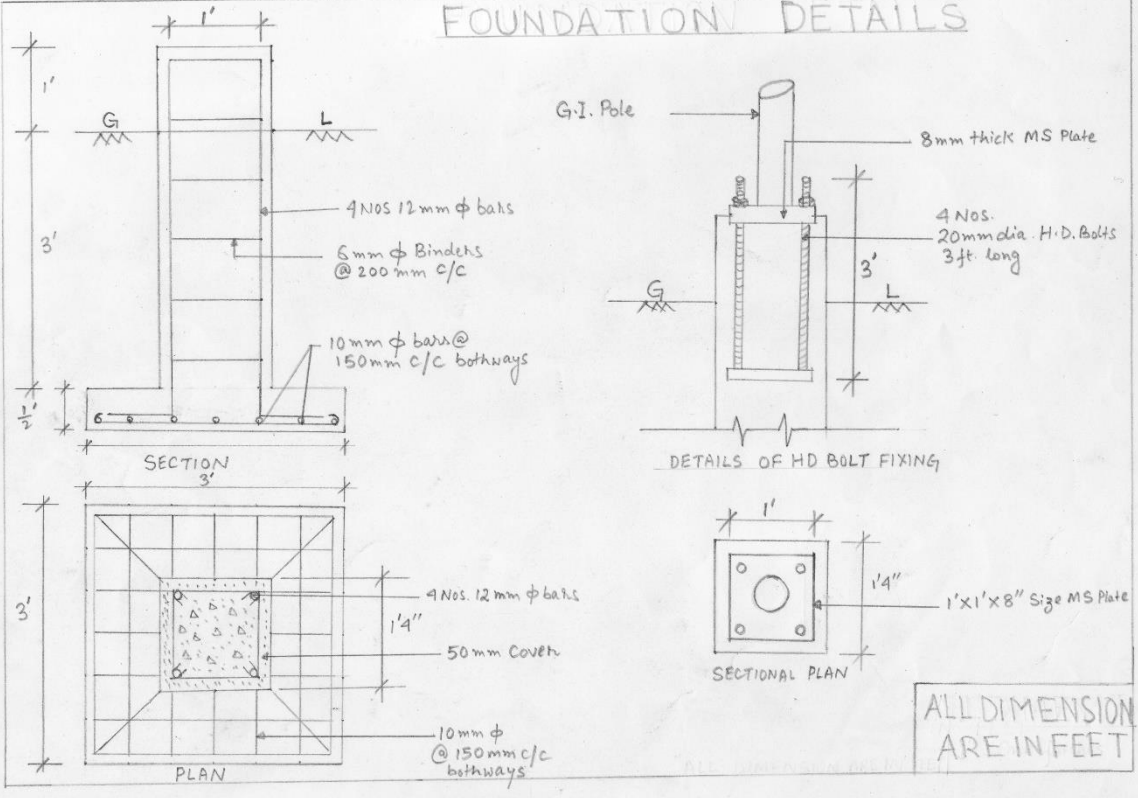
### **OPERATION and MAINTENANCE MANUAL**

An Operation, Instruction and Maintenance Manual, in English and the local language, should be provided with the components of Solar LED Lighting System. The following minimum details must be provided in the Manual:

- Basic principles of Photovoltaics.
- A small write-up (with a block diagram) on Solar Street Lighting System - its components, PV module, battery, electronics and luminaire and expected performance.
- Significance of indicators.
- Type, Model number, voltage & capacity of the battery, used in the system.
- The make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of W-LEDs used in the lighting system must be indicated in the manual.
- Clear instructions about mounting of PV module(s).
- Clear instructions on regular maintenance and trouble shooting of the Solar Street Lighting System.
- DO's and DONT's.

#### **Details of RCC Foundation:**

# FOUNDATION DETAILS



## **6. Five Years Maintenance and Performance Warrantee Contract (MPWC)**

### **1.0 The Maintenance and Performance Warrantee Contract (MPWC)**

- 1.1 After the works are awarded to the successful Bidder/Bidders, he/they enter into a Maintenance and Performance Warrantee Contract (MPWC) with MANIREDA which includes the scope of operation and maintenance of the components for a period of 5(five) years. The date of MPWC period shall begin from the date of actual commissioning of the system. The MPWC shall include servicing & replacement guarantee for parts and components (such as battery, luminary, etc.) for 5 years and 25 years for SPV module from the date of installation & commissioning.
- 1.2 The maintenance service provided shall ensure proper functioning of the components as a whole. All preventive/routine maintenance and breakdown/corrective maintenance required for ensuring maximum uptime shall have to be provided by the Supplier. The Contractor shall furnish a Performance Report half yearly (every six months) to MANIREDA within 15<sup>th</sup> day of following month. The Maintenance and Performance Warrantee Contract (MPWC) shall have two distinct components as described below.

#### **2.0 Preventive/Routine Maintenance**

- 2.1 This shall include activities such as, cleaning and checking the health of the components for proper functioning of the solar street light as a whole.

#### **3.0 Breakdown/Corrective Maintenance**

- 3.1 Whenever a complaint is lodged by the user/MANIREDA, the bidder shall attend to the same within a reasonable period of 3 days and in any case the breakdown shall be corrected within a period not exceeding 7 days from the date of complaint.
- 3.2 The bidder shall maintain the following facilities at the local Service Centre for ensuring highest level of services to the end user
1. Adequately trained manpower, specifically trained by the bidder for carrying out the service activities.
  2. Adequate provisions for record keeping, which shall inter-alia, include the following :
    - (a) Details of component supplied within the command area of the service station including site and records of routine maintenance carried out (duly signed by the end user). These records shall include voltage, current, indicator charge, full glow, charge controller operation, electronics, etc.
    - (b) History record sheets of maintenance done.
  3. Adequate spares and manpower for ensuring least down time of an individual system.
  4. The Service Center shall send summary service reports to MANIREDA on half yearly basis. These reports shall include the following information :
    - (a) Number of systems covered by the Service Center
    - (b) Number of systems working satisfactorily on the reporting date
    - (c) Number of complaints received during the period of reporting
    - (d) Number of complaints attend during the period of reporting
    - (e) Major cause of failure, as observed
    - (f) Major replacement made during the reporting period

Separate report shall be submitted for each type of systems manufacture wise in case the service center caters to the requirement of more than one manufacture

- 3.3 The records maintained at the Service Center shall be available from time to time to MANIREDA.
- 3.4 The date of MPWC maintenance period shall begin on the date of actual commissioning of the systems.
- 3.5 Bidder shall furnish details of infrastructure that are presently available for establishing of Service Centers.

## 7. Proforma - 1

### Forwarding Letter

NIB No.: 67/2/2018/LED/SSL/MANIREDA

To,

The Director Manipur Renewable Energy Development Agency (MANIREDA) 2<sup>nd</sup> Floor,  
South Block, Secured Office Complex, Near 2<sup>nd</sup> M.R. Gate, Imphal-Dimapur Road, Imphal-795001, Manipur.

**Sub : Offer In Response to Notice Inviting Bid No..... for Design, Manufacturing, Supply, Installation, Testing & Commissioning Including 5 Years Maintenance and Performance Warrantee Contract (MPWC) of components for solar street light.**

Sir,

With reference to the above we are submitting this offer after having fully read and understood the nature of the work and having carefully noted all the specifications, terms & conditions laid down in the bid document. This offer is hereby submitted in sealed envelopes duly marked as indicated below :

(Technical Proposal): Submitted in original the Financial Proposal is submitted online in e-tender we also confirm that:

2. We are an Indian company/firm.
3. The components be indigenously manufactured.
4. We have never been debarred from executing similar type of work by any Central/ State/ Public Sector Undertaking/Department/Nodal Agency.
5. The Bid Document is downloaded from MANIREDA website and necessary document in support is enclosed.
6. We shall execute the offer/work order as per specifications, terms & conditions of the Bid Documents on award of work.
7. Our offer shall remain valid for placement of purchase orders up to 365 days from the due date of submission of offer.
8. If at any time, any of the declarations submitted by us is found to be false, our offer or order is liable to rejection.

Yours faithfully,

(Signature of Authorized Signatory)

Name :  
Designation :  
Company Seal :

8. Proforma - 2

**Authority Letter for Signing Bid Document & Attending Bid Opening Meeting**

NIB No.: 67/2/2018/LED/SSL/MANIREDA

Date : .....

To,

The Director

Manipur Renewable Energy Development Agency (MANIREDA),  
2<sup>nd</sup> Floor, South Block, Secured Office Complex, Near 2<sup>nd</sup> M.R. Gate, Imphal-Dimapur Road,  
Imphal-795001, Manipur.

**Sub : Authority Letter for Signing Bid Document & Attending Bid Opening Meeting**

I hereby authorize ..... (Name & Designation)  
to sign the Bid Document and attend the Bid Opening Meeting to be held on.....  
at MANIREDA on behalf of our company.

He is also authorized to provide clarifications/confirmations, if any, and such  
clarifications/confirmations shall be binding on the company. The specimen signature  
of..... is attested below.

(Specimen Signature)

Name : .....  
Designation : .....

(Signature of Authorized Signatory)

Name : .....  
Designation : .....  
Company Seal :

Yours faithfully,

(Signature of Authorized Signatory)

Name:

Designation:

Note :

1. To be submitted by bidders on official letter head of the company.
2. Authorization can be for more than one person

### 9. Proforma-3

#### Format for Guarantee Card to be Supplied with Each component

NIB No : 67/2/2018/LED/SSL/MANIREDA

Date : .....

(To be supplied by bidders on the official letter head of the company/firm)

#### Guarantee Card

|    |  |  |
|----|--|--|
| 1. | Name & Address of the Manufacturer/ Supplier of the Component                          |  |
| 2. | Name & Address of the Purchasing Agency  |  |
| 3. | Date of Supply of the Component  |  |
| 4. | Details of Luminary  |  |
|    | (a) Name of the Manufacturer   |  |
|    | (b) Make   |  |
|    | (c) Model  |  |
|    | (d) Serial No.   |  |
|    | (e) Wattage of the luminary  |  |
|    | (f) Guarantee Valid Up To  |  |
| 5. | Details of SPV Module  |  |
|    | (a) Name of the Manufacturer   |  |
|    | (b) Make   |  |
|    | (c) Model  |  |
|    | (d) Serial No.   |  |
|    | (e) Wattage of the luminary  |  |
|    | (f) Guarantee Valid Up To  |  |
| 6. | Details of Battery   |  |
|    | (a) Name of the Manufacturer   |  |
|    | (b) Make   |  |
|    | (c) Model  |  |
|    | (d) Batch/Serial No(s).  |  |
|    | (e) Month & Year of Manufacture  |  |
|    | (f) Rated V & AH Capacity Rated at 25 <sup>o</sup> C                                   |  |
|    | (g) Guarantee Valid Up To  |  |
| 7. | Details of Other balance components  |  |
|    | (a) Name of the Manufacturer   |  |
|    | (b) Make   |  |
|    | (c) Model  |  |
|    | (d) Serial No(s).  |  |
|    | (e) Month & Year of Manufacture  |  |
|    | (f) Guarantee valid Up To  |  |
| 8. | Designation & Address of the Person to be Contacted for Claiming Guarantee Obligations |  |

(Signature of Authorized Signatory with Name, Designation & Company Seal)



**10. Proforma - 4**

**Format for Details of the Luminary, Battery, SPV module, Cables, etc. & Utilization Report for component of solar street light Installed**

NIB No. : 67/2/2018/LED/SSL/MANIREDA  
 Date : .....

**Name of Manufacturer/Supplier :** .....  
**Name of Consignee :** .....  
**Address of Consignee :** .....  
**(A) Components.**

| Sl. No. | Name of site | Luminary |      |                     | Battery |      |                     | SPV Module |      |                     | Date of installation |
|---------|--------------|----------|------|---------------------|---------|------|---------------------|------------|------|---------------------|----------------------|
|         |              | Number   | Make | Year of Manufacture | Number  | Make | Year of Manufacture | Number     | Make | Year of Manufacture |                      |
|         |              |          |      |                     |         |      |                     |            |      |                     |                      |
|         |              |          |      |                     |         |      |                     |            |      |                     |                      |
|         |              |          |      |                     |         |      |                     |            |      |                     |                      |
|         |              |          |      |                     |         |      |                     |            |      |                     |                      |
|         |              |          |      |                     |         |      |                     |            |      |                     |                      |
|         |              |          |      |                     |         |      |                     |            |      |                     |                      |
|         |              |          |      |                     |         |      |                     |            |      |                     |                      |
|         |              |          |      |                     |         |      |                     |            |      |                     |                      |
|         |              |          |      |                     |         |      |                     |            |      |                     |                      |

## 11.Proforma - 5

|  |
|--|
| <b>Format for Submitting the PRICE SCHEDULE/FINANCIAL BID (To be uploaded ONLINE only)</b> |
|--|

BID No. : 67/2/2018/LED/SSL/MANIREDA

Date : .....

To,

The Director

Manipur Renewable Energy Development Agency (MANIREDA), 2<sup>nd</sup> Floor, South Block, Secured Office Complex, Near 2<sup>nd</sup> M.R. Gate, Imphal-Dimapur Road, Imphal-795001, Manipur.

### Price Schedule

| Sl. No. | Item/Description  | Total Bid Quantity | Price in Rupees |              |
|---------|---|--------------------|-----------------|--------------|
|         |   |                    | Unit Price      | Total Amount |
| 1       | 2   | 3                  | 4               | 5            |
| 1       | Cost of SPV Module of 100 Wp  | 8                  |                 |              |
| 2       | Add GST @5% on Item No. 1   | 8                  |                 |              |
| 3       | Supply of components for W-LED Solar Street Light (Semi Integrated System) of the following:<br>a) LED based Luminary set (15 Watt) including Micro Controller based Solar Charge Controller(15A)<br>b) LiFePO4 Battery (12.8V/30Ah) with inbuilt Battery housing<br>c) Luminary Arm with fitting accessories<br>d) Interconnecting Cable & wiring materials<br>e) Balance of component such as painting of poles, Nuts & Bolts, etc. | 200                |                 |              |
| 4       | Add GST @12% on Item No. 3  | 200                |                 |              |
| 5       | <b>Cost of Components</b>   | -                  |                 |              |
| 6       | Shifting of Poles with RCC foundation   | 5                  |                 |              |
| 7       | Add GST @ 18% on Item No. 6   | 5                  |                 |              |
| 8       | Painting of Poles & other accessories   | 100                |                 |              |
| 9       | Add GST @ 18% on Item No. 8   | 100                |                 |              |
| 10      | Installation & Commissioning Charges  | 200                |                 |              |
| 11      | Add GST @18% on Item No. 10   | 200                |                 |              |
| 12      | Maintenance Performance Warranty Contract (MPWC) charges for 5 years  | 200                |                 |              |
| 13      | Add GST @18% on Item No. 12   | 200                |                 |              |
| 14      | <b>Sub-Total</b>  | -                  |                 |              |
| 15      | <b>Add State Charges</b>  |                    |                 |              |
| 16      | Labour Cess @1% on Installation & Commissioning   | 200                |                 |              |
| 17      | Agency charges @11.75% on Installation & Commissioning charges  | 200                |                 |              |
| 18      | Contingency charges @3% on Installation & Commissioning charges   | 200                |                 |              |
| 19      | <b>Grand Total</b>  | -                  |                 |              |
| 20      | <b>Total Rupees in words</b>  |                    |                 |              |

(DO NOT SUBMIT FINANCIAL BID IN PHYSICAL FORM, TO BE UPLOADED ONLINE ONLY)

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

Yours faithfully,

(Signature of Authorized Signatory)

Name:

Designation :

Company seal :

## 12. Check List & Format for Submission of Bid

| Sl. No | Annexure and Proforma No. | Particulars   | Yes/No, Flag No. | To be done  |
|--------|---------------------------|---|------------------|---|
| 1      | Annexure-I                | Details of Earnest Money(D.D from any nationalized bank and validity for at least 3months from the last date of submission of bids  |                  | Both uploading & hard copy                                      |
| 2      | Annexure-II               | A copy of the Certificate for solar module as per IEC Standards   |                  | Both uploading & hard copy                                      |
| 3      | Annexure-III              | Test Certificate conforming to MNRE approved specifications of the components of SPV street light like Battery, solar luminary, etc. from a MNRE authorized testing centres /NABL       |                  | Both uploading & hard copy                                      |
| 4      | Annexure-IV               | A copy of valid GST registration Certificate along with copy of latest GSTR-3B Challan  |                  | Hard copy   |
| 5      | Annexure-V                | A summarized sheet of cumulative experience of the bidder in PV systems/SPV street light whose work order should be in the name of the bidder.  |                  | Statement for uploading but details of work orders in hard copy |
| 6      | Annexure-VI               | Overall Average Annual Turnover of the Company/Firm/Corporation in the last two financial years (A summarized sheet of turnover of last two Financial Years certified by registered CA) |                  | Both uploading & hard copy                                      |
| 7      | Annexure-VII              | Copy of MoU signed for Pre-bid tie-up   |                  | Hard copy   |
| 8      | Annexure-VIII             | Demand Draft for cost of bid document/Photocopy of Demand Draft   |                  | Hard copy   |
| 9      | Annexure-IX               | Letter of acceptance to furnish the information in Proforma – 7, Proforma – 8, Proforma – 9,  |                  | hard copy   |
| 10     | Annexure-X                | Photographs of MD or Two Directors (in case of Ltd. Company.)   |                  | Hard copy   |
| 11     | Annexure-XI               | Technical Particular data sheet of SPV Programme of Bidder  |                  | Hard copy   |
| 12     | Annexure-XII              | Photographs of Registered Office & Factory attested by Gazetted Officer or Notary Public.   |                  | Hard copy   |
| 13     | Annexure-XIII             | A tentative overall supply schedule in the form of Bar Chart  |                  | Hard copy   |
| 14     | Proforma – 1              | Forwarding Letter   |                  | Both uploading & hard copy                                      |
| 15     | Proforma – 2              | Authority Letter for Signing Bid Document & Attending Bid Opening Meeting   |                  | Both uploading & hard copy                                      |
| 16     | Proforma - 5              | Price Bid   |                  | <b>Only Uploading</b>   |

**Please ensure:**

1. That all information is provided strictly in the order mentioned in the check list mentioned above.
2. Note that this is a zero deviation tender. Bidders are advised to strictly confirm compliance to bid conditions and not to stipulate any deviation/conditions in their offer. Subsequent to bid submission, MANIREDA may or may not seek confirmations/clarifications and any offer(s) not in line with Bid conditions shall be liable for rejection.
3. Any clarification/confirmation bidder may require shall be obtained from MANIREDA before submission of the bid.
4. Bidder shall submit complete bidding document including subsequent amendment, modification and revision, duly signed and stamped as a token of having read, understood and accepted all the terms and condition mentioned therein.

**13. Proforma -6**

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| <p><b>PROFORMA OF APPLICATION FOR PAYMENT</b><br/>(On the Letter Head of the Firm)</p> |
|--|

Unit Reference:

Date:

|                              |                  |
|------------------------------|------------------|
| Name of Contractor:          | Contract No.:    |
| Contract Name :              |                  |
| Application Serial Number. : | Contract Value : |

To,

The Director  
 Manipur Renewable Energy Development Agency (MANIREDA)  
 Imphal, Manipur

Dear Sir, APPLICATION FOR PAYMENT

Pursuant to the above referred Contract dated .....the undersigned hereby applies for payment of an amount of .....(Specify amount and currency in which claim is made).

2.The above amount is on account of :[TICK whichever is applicable]

- Initial advance
- Interim Payment as advance
- Progressive payment against dispatch of equipment Progressive payment against receipt of equipment at site Progressive payment against Erection/installation & commissioning Ocean freight & marine insurance
- Inland transportation
- Inland insurance
- Price adjustment
- Extra work not specified in Contract (Ref. Contract Change order No.....)
- Other (specify) Final payment

As detailed in the attached Schedule (S) which form an integral part of this application.

3.The payment claimed is as per item(s) No.(s) .....of the payment schedule annexed to the above - mentioned Contract.

4.The application consists of this page, a summary of claim statement and the following signed schedule

- i).....
- ii).....
- iii).....

The following documents are also enclosed a).....

- b).....
- c).....

Signature of Contractor/Authorised Signatory.

### 14. Proforma- 7

#### MATERIALS INSPECTION CLEARANCE CERTIFICATE (MICC)

1. Name of the Work: Design, manufacture, supply of components, painting pole & hardware, shifting of pole, installation and commissioning of LED solar street light including 5 years MPWC in Manipur.
2. Name of Worksite/Location: .....
3. Name of the Firm/Contractor: .....
4. Work Order No.: ..... dated .....
5. Shipment No.....
6. Date shipped:.....,
7. Shipped From .....
8. Shipped To Imphal

| SL. No. | Item Description   | Qty./ system | Invoice No. & date | Challan No. & date | Make | Unit price | Amount | Remarks |
|---------|--|--------------|--------------------|--------------------|------|------------|--------|---------|
| 1       | 2  | 3            | 4                  | 5                  | 6    | 7          | 8      | 9       |
| 1.      | SPV Module   |              |                    |                    |      |            |        |         |
| 2.      | LED based Luminary set (15 Watt) including Micro Controller based Solar Charge Controller(15A) |              |                    |                    |      |            |        |         |
| 3.      | LiFePO4 Battery (12.8V/30Ah) with inbuilt  |              |                    |                    |      |            |        |         |
| 4.      | Luminary Arm with fitting accessories  |              |                    |                    |      |            |        |         |
| 5.      | Interconnecting Cable & wiring materials   |              |                    |                    |      |            |        |         |
| 6.      | Painting of poles  |              |                    |                    |      |            |        |         |
| 7.      | Shifting of poles  |              |                    |                    |      |            |        |         |
| 8.      | Balance of component such as Nuts & Bolts, Clamp, etc.   |              |                    |                    |      |            |        |         |
| 9.(a)   | Manual   |              |                    |                    |      |            |        |         |
| (b)     | Others if any  |              |                    |                    |      |            |        |         |

**9. Enclosed documents:** Packing List with model numbers, Invoice, Challan, Goods Consignment Note, Way Bill etc.

**10. Receiver's Use:** Quantities shown in column 2 were received in apparent good condition except as noted.

Date of received: \_\_\_\_\_ Signature of authorized representative of MANIREDA

Name: \_\_\_\_\_

Designation: Field Assistant as Store Assistant

**11. Inspected on:** .....and ..... jointly by MANIREDA officials and representative of M/s ..... at godown of MANIREDA/warehouse of the Firm at Imphal treated as transits Godown of MANIREDA and found okay.

**12. Destination:** Acceptance of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents.

Date: \_\_\_\_\_

Signature of authorized MANIREDA representative

Name: \_\_\_\_\_

Designation: Scheme Officer

**15. Proforma - 8**

**COMPLETION CERTIFICATE**

- 1. Name of the Work:** Design, manufacture, supply of components, installation and Commissioning, shifting of poles including RCC foundation, painting of poles & hardware for solar street light including 5 years MPWC in Manipur.
- 2. Name of Worksite/Location:**
- 3. Name of the Firm/Contractor. :** .....
- 4. Work Order No.:** ..... dated .....
- 5. Date of completion:**.....

| SL. No. | Item Description   | Qty. | Make | Product Serial No. | Remarks if any |
|---------|--|------|------|--------------------|----------------|
| 1       | 2  | 3    | 4    | 5                  | 9              |
| 1.      | SPV Module   |      |      |                    |                |
| 2.      | LED based Luminary set (15 Watt) including Micro Controller based Solar Charge Controller(15A) |      |      |                    |                |
| 3.      | LiFePO4 Battery (12.8V/30Ah) with inbuilt Battery housing                                      |      |      |                    |                |
| 4.      | Luminary Arm with fitting  |      |      |                    |                |
| 5.      | Interconnecting Cable & wiring materials   |      |      |                    |                |
| 6.      | Painting of poles & hardware   |      |      |                    |                |
| 7.      | Shifting   |      |      |                    |                |
| 8.      | Balance of component such as Nuts & Bolts, Clamps, etc.  |      |      |                    |                |
| 9.(a)   | Manual   |      |      |                    |                |
| (b)     | Others if any  |      |      |                    |                |

- 9. Enclosed documents:** 3 copies of completion reports along with photographs of the components installed are hereby submitted to MANIREDA, both in hard and soft copies wherein details of equipment given in format above.
- 10. Signature of Beneficiary:** Quantities shown in column 2 were received , installed and tested at the location intimated by us.

Date of received and installed:

Signature of Scheme Officer, MANIREDA,  
Name:  
Designation:

- 11. Inspected on:** .....and ..... jointly by MANIREDA officials and representative of M/s.....at the site and found okay.