

**Bid Specifications for  
Solar Street Lighting System  
(CFL Based)  
Under  
Solar Photovoltaic Programme  
For Financial Year 2013-14**

**Sponsored by  
(JREDA)  
Government of Jharkhand**



**Jharkhand Renewable Energy Development Agency (JREDA)**

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**Notice Inviting Bid**  
**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

**Sub: Manufacturing, Supply, Installation and Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Indigenous CFL Based Solar Street Lighting Systems (SSLSs) under Solar Photovoltaic Programme 2013-14 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis.**

**Preamble**

As part of Solar Photovoltaic Programme, JREDA invites bid for “**Manufacturing, Supply, Installation and Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Indigenous CFL Based Solar Street Lighting Systems (SSLSs) under Solar Photovoltaic Programme 2013-14 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis**” for short listing of experienced & eligible bidders to whom work shall be allocated for successful execution of the project in a defined time frame. **No bidders shall submit bid for quantity less than minimum lot size.**

**Part –IThe Technical Conditions:**

The bidder should fulfill the following Technical & eligibility conditions. The bidder should submit the check list for Technical bid for this purpose as per the Performa given at **Annexure-2.**

1. The bidder should be MNRE approved Channel Partner/ MNRE approved manufacturer/ MNRE approved PV System integrator/A registered manufacturing company/Firm/Corporation in India (Including MSME of Jharkhand) of at least one of the major sub systems namely SPV Cells/ Modules or Battery or PV System Electronics (Confirming to relevant National/ International Standards). The bidder shall furnish either relevant MNRE certificate or concerned Industry Department certificate clearly indicating that they are manufacturers of SPV Power Plant including SPV Cells/ Modules or Battery or PV System Electronics as applicable. **Authorized dealers and subcontractors are not eligible to participate.**
2. The bidder should be a functional organization. To substantiate this claim, the bidder should submit the copy of balance sheet for last 3 years or from the date of establishment to 31.03.2012, whichever is applicable. These balance sheets should be duly certified by the Statutory Auditor with his stamp.
3. Registered Micro, Small & Medium Enterprise (MSME) of Jharkhand should submit the attested copy of Registration given by Industry Department.
4. **Experience Requirement:**

**For General Bidder:** Bidder should have cumulative experience of executing contracts of supply of at least **25% of Bid capacity of Solar Street Lighting System** to any SNA / Govt. Organization / PSU in the last Five years ending up to date of advertisement of this tender. The bidder submitting the bid for higher nos. of SHLs will require having cumulative work experience equal to **25%** of the bid capacity.

**For MSME of Jharkhand:** Bidder should have cumulative experience of executing contracts of supply of at least **10% of Bid capacity of Solar Street Lighting System** to any SNA / Govt. Organization / PSU in the last Five years ending up to date of advertisement of this tender. The bidder submitting the bid for higher nos. of SHLs will

require having cumulative work experience equal to **10%** of the bid capacity. No experience is required for new MSME unit of Jharkhand which is functional since last two years (Audited account by C.A. to be submitted).

The copy of order and certificate indicating its successful execution should be enclosed with the check list as at **Annexure-2**.

5. The offered PV Modules should be as per IEC61215 edition II / BIS 14286 from an NABL or IECQ accredited laboratory standards having test certificates prescribed by MNRE. The valid test certificate should be enclosed along with the check list as at **Annexure-2**. The offered PV Modules should be Crystalline Silicon PV Modules as per IEC 61215 Standards or IS14286 and having test certificates prescribed by MNRE. In addition, the modules must conform to IEC 61730 part I – requirement for construction and part – II requirement for testing, for safety qualification or equivalent IS. The offered modules shall be of standard make, specifications and manufacturing brand like Vikram solar/Waree/ Tata power or any reputed brand approved by MNRE having test certificates issued from **MNRE specified** test laboratories. The valid test reports should be enclosed along with the check list as at **Annexure-2**. The bidder has to supply the modules of same make, specifications and standard brand for which test reports submitted in the tender otherwise bid document shall be liable for rejection.
6. The bidder must be in possession of valid test report from any of the following test centers:-
  - Solar Energy Centre Gwalpahari – Gurgaon, Haryana (SEC)
  - Electronics Regional Test Laboratory (East)) Bidhan Nagar, Kolkata (ERTL)
  - Central Power Research Institute, Bangalore (CPRI)

The latest test certificate should confirm that Solar Street Lighting Systems (Model – II) are as per MNRE specifications which are available on MNRE website. The test certificate issued before 1<sup>st</sup> April 2009 will lead to outright rejection of the BID.

7. Batteries should fulfil the requirement as per specification given at Technical Specification for Capacity Test Charge/Discharge efficiency Self-Discharge as per MNRE requirements and valid test reports to be submitted along with the check list as at **Annexure-2**. The certificate should be in a form of an undertaking letter from the manufacturer complying all the technical specifications of battery. The offered batteries shall be standard make, specifications and standard brands such as HBL/EXIDE/AMRARAJA/NED or any reputed brand approved by MNRE. The bidder has to supply the battery of same make, specification and manufacturing brand for which test reports submitted in the tender otherwise bid document shall liable to rejection.
8. The Bidder should have valid CST/State VAT/ TIN registration certificate. A copy of which should be enclosed in the check list as at **Annexure-2**.
9. The Bidder should confirm that they have the resources and capability to supply the offered quantity within the scheduled period in the form of an undertaking. The Performa for undertaking is given at Annexure – 3.
10. **Turnover Requirement:**  
**For General Bidder:** Bidder should have the minimum average Annual Turnover of **25% of project estimated cost** derived from the last three financial years ending on 31.03.2013 on the basis of audited annual accounts for SPV Systems for minimum lot size. The bidder submitting the bid for higher nos. of SHLs will require to have average Annual Turnover in same higher proportion (**25%**).

**For MSME of Jharkhand:** Bidder should have the average Annual Turnover of **10% of project estimated cost** derived from the last three financial years ending on 31.03.2013 on the basis of audited annual accounts for SPV Systems for minimum lot size. The bidder submitting the bid for higher nos. of SLs will require to have average Annual Turnover in same higher proportion (**10%**).

The certificate should be as per the Performa given at **Annexure-12**.

**11. Net worth Requirement:**

**For General Bidder:** Bidder should have Positive Net Worth of minimum 10% of estimated cost as on 31.03.2013 on the basis of audited annual accounts.

**For MSME of Jharkhand:** Bidder should have Positive Net Worth as on 31.03.2013 on the basis of audited annual accounts.

Net worth certificate should be as per the Performa given at **Annexure-13**.

12. The bidder should either purchase the bid document from JREDA office by submitting a demand draft of Rs. 10,000/- (Rupees Ten thousand only) in favour of "Director, JREDA" on any Indian Nationalized Bank/Scheduled Bank, payable at "Ranchi". Bidders may also download the bid document from JREDA website ([www.jreda.com](http://www.jreda.com)) and submit the cost of the bid document of requisite value in the form of Demand Draft, as applicable along with Part – I (Technical Bid).
13. Bidders should submit in Part – I (Technical Bid) the earnest money in the form of Bank Guarantee of requisite value as mentioned in "Particulars of Tender". The Bank Guarantee shall be made in favour of "Director, JREDA" payable at Ranchi from any Indian Nationalized bank/Scheduled bank. The bank guarantee shall remain valid for 12 months. Only Original Bank Guarantee shall be accepted.
14. **Empanelment Procedure after opening of Financial Bid:** The Financial bid should be submitted in a separate envelope as per the Performa given at **Annexure-5**. Bidder can quote for maximum lot of 1500 nos. and minimum lot for 500 nos.

JREDA will allot the maximum lot to L<sub>1</sub> bidder on basis of his financial competence. L<sub>2</sub> L<sub>3</sub> and so on will be allotted on basis of his financial competence. However if maximum lot is awarded to MSME (L<sub>1</sub> bidder) then quota allotted for MSME will be distributed among the bidder of MSME to L<sub>2</sub>, L<sub>3</sub> and so on. The lowest rate i.e. L<sub>1</sub> received would be the appropriate rate for awarding work. The bidders shall be ranked as L<sub>1</sub>, L<sub>2</sub>, L<sub>3</sub> and so on based on financial bids.

For MSME registered in Jharkhand relevant provisions of section of Jharkhand Industrial Policy 2012 shall be applicable for work allocation under the tender. To encourage the new MSMEs of Jharkhand, JREDA may consider allotting up to 75 Nos. from MSME quota to one or more new units who have no work experience in the field but otherwise qualified technically and are functional since the last two financial years

15. For claiming the benefits provided to MSMEs of Jharkhand, they must possess the following :

- Valid registration certificate from the Industries Department, Govt. of Jharkhand
- Manufacturing factory should have valid electrical connection from the state of Discom. E.g. JSEB / JUSCO/ Tata Steel / BSL Bokaro / DVC as the case may be.
- case the manufacturing factory in the territory of Jharkhand having its own power generation facility, it must be certified by Electrical Inspector, Energy Department, Government of Jharkhand with up to date deposit of Inspection fee by Electrical Inspector, Government of Jharkhand.

**Particulars of Bid**

**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

Eligible and prospective Bidders may quote their offers as per details mentioned below:

|    |  |  |
|----|--|--|
| 1. | Name of work   | <b>Manufacturing, Supply, Installation and Testing &amp; Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Indigenous CFL Based Solar Street Lighting Systems (SSLSs) under Solar Photovoltaic Programme 2013-14 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis.</b> |
| 2  | Tentative Quantity   | CFL based Solar Street Lighting System: <b>3000 Nos.</b><br>The quantity mentioned above is tentative and subject to increase or decrease depending on the actual requirement at the time of placing order and resources available. The estimated cost is about <b>Rs.6 crore</b>  |
| 3  | Minimum lot size   | CFL based Solar Street Lighting System: <b>500 Nos.</b><br><b>No bidder shall submit bid for quantity less than minimum lot size.</b>  |
| 4  | Cost of Bid document (Non-refundable)  | ❖ Rs.10, 000/- (Rupees Ten Thousands only) for General Bidder.<br>❖ Rs. <b>Nil</b> for MSME of Jharkhand.  |
| 5  | Earnest Money Deposit  | For General Bidder: <b>Rs. 2.0 lakh</b> for the lot size of 500 Nos. CFL based SSLS<br>The bidders for higher capacities are required to submit EMD in the same proportion.<br>For MSME of Jharkhand: <b>Nil.</b>  |
| 6  | Time of completion   | Six months from the date of issue of purchase order/ intimation.   |
| 7  | Validity of offer for acceptance   | till 31.03.2015.   |
| 8  | Date of commencement and time of Issue of bid documents                      | From <b>14.03.2014.</b>  |
| 9  | Last date & time of submission of bids document                              | <b>21.04.2014</b> up to 3.00 PM.   |
| 10 | Date & time of opening Technical bid Part-I                                  | <b>21.04.2014</b> at 3.30 PM.  |
| 11 | Date & time of opening Financial bid Part-II                                 | Shall be intimated in due course on website & letter.  |
| 12 | Place of issue and submission of bid documents and address for communication | Jharkhand Renewable Energy Development Agency(JREDA)<br>3rd Floor, S.L.D.C. Building,<br>Kusai Colony, Doranda, Ranchi-834002.<br>Ph.: 0651-2491161, Fax: 0651-2491165<br>Web site: <a href="http://www.jreda.com">www.jreda.com</a> E-mail: <a href="mailto:info@jreda.com">info@jreda.com</a>                            |

### **Instruction to Bidder**

Jharkhand Renewable Energy Development Agency (JREDA), Ranchi invites offers from eligible Indian bidders for the tender for the mentioned work with your best bidding price offer as per our 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 **34 Pages**. In addition, any other documents/instructions/amendments/revisions issued by JREDA 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** Bid document can be purchased from JREDA office by submitting a Demand Draft of Rs. 10,000/- only drawn in favor of "Director, JREDA" on any Indian Nationalized Bank/Scheduled Bank, payable at "Ranchi" of requisite value, as applicable, during the time and period mentioned in "Particulars of Tender".

**2.2** Bidders may also download the bid document from JREDA website (www.jreda.com) and submit the cost of the bid document of requisite value in the form of Demand Draft, as applicable along with **Part – I (Technical Bid)**.

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

#### **3. Earnest Money**

**3.1** Bidders shall submit in **Part – I (Technical Bid)** the earnest money in the form of Bank Guarantee of requisite value as mentioned in "Particulars of Tender". The Bank Guarantee shall be made in favor of "Director, JREDA" payable at Ranchi from any Indian Nationalized bank/Scheduled bank.

**3.2** The bank guarantee shall remain valid for 12 months.

**3.3** Bidders seeking concession/exemption from submission of cost of bid document and/or earnest money, shall have to submit an attested photocopy of relevant MSME of Jharkhand certificate as applicable, in Part – I of the bid application. ***Non submission of relevant certificate will lead to rejection of bid.***

**3.4** The earnest money shall be returned to all unsuccessful bidders, within thirty days from the date of placement of LOI/LOA to the successful bidder(s).

**3.5** The earnest money shall be forfeited if –

- a. Any bidder withdraws his bid or resiles from his offer during the validity period.
- b. The successful bidder fails to furnish his Acceptance of the order within fifteen days of placement of LOI/LOA by JREDA.
- c. The bidder fails to successfully complete the work within the stipulated time frame. Delay in completion due to extreme and unavoidable situations shall have to get approved by Director, JREDA. This approval shall also have a cut-off date by which the entire work shall have to be completed.

#### **4. Security Deposit:**

- 4.1** Successful General bidders shall submit a security deposit @10% of the allotted work order value in the form of Bank Guarantee on or before 20 days from issuing work order.
- 4.2** Successful MSME bidders are exempted from submission of security deposit.
- 4.3** The 50% Security Deposit shall be refunded / released to the bidder after expiry of 60 days from the actual date of successful supply. The balance 50% Security Deposit will have to be maintained by the bidder with JREDA as Performance Guarantee till the completion of warrantee period of complete system.

#### **5. Performance Guarantee:**

- 5.1** 50% Security deposit of successful General bidders shall be treated as performance guarantee after supply of material.
- 5.2** Successful MSME bidders shall submit a Performance Guarantee @2.5% of the allotted work order value in the form of bank guarantee before release of payment.
- 5.3** The Performance Guarantee will have to be maintained by the bidder with JREDA till the completion of warrantee period.
- 5.4** The Security Deposit/Performance Guarantee shall be submitted in the form of bank guarantee in favour of "Director, JREDA" payable at Ranchi from any Indian Nationalized bank/Scheduled bank.
- 5.5** Non submission of Security Deposit/Performance Guarantee within the time frame, shall lead to forfeiture of EMD and cancellation of LOI/LOA.
- 5.6** If Bidder/MSME unit fails to carry out the work allotted to him as per the provisions of the tender documents then such Bidder/MSME unit may be black listed for future awards of work.

#### **6. Submission of Bids:**

- 6.1** 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. The bid should be submitted along with covering letter as given at **Annexure-1**.
- 6.2** The bid shall be prepared and submitted by typing or printing in English 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. The bidder shall also enclose the information about bidding firm as per **Annexure-6**.
- 6.3** Original copy of bid document, amendments/revisions to bid document and one soft copy, including minutes of meeting(s), issued by JREDA, if any, shall be signed and submitted along with the bid.
- 6.4** All the Proforma must be on the bidder's official letterhead (if specified). Any change in wording of the Performa will not be allowed. The bidder shall submit a declaration as given at **Annexure-7**.
- 6.5** The offer shall contain no erasures or overwriting except as necessary to correct errors made by bidder. The person signing the offer shall initial such corrections.



**6.6** Complete bid document including all enclosures should be submitted in hard bond or spiral binding and all pages should be numbered (except leaflet/catalogue) and must be signed by the company's authorized signatory with seal of the company. **Non compliance of this term shall lead to rejection of bid document**

**6.7** The bidders should submit the bid in two envelopes, The **Part-I (Technical bid)** and the **Part – II (Price Bid)** should be sealed in separate envelopes and both envelopes should be sealed in a third envelope. The Part – II (Price Bid) of only such bidders would be opened who qualify in the **Part – I (Technical Bid)**. The **Part-I (Technical Bid)** should be sealed in an envelope super scribed with (i) NIT NO.(ii) "**Part-I Technical Bid**", (iii) Name and address of the contact person of the bidding firm, and (iv) should be addressed to Director, JREDA.

**6.8 Part –I (Technical Bid)** should not contain price of any item. Such cases, even if found anywhere, shall not be given any cognizance.

**6.9** The **Part-II (Price Bid)** should be sealed in an envelope super scribed with NIT No., "Part – II Price Bid", Name and address of the contact person of the bidding firm, and should be addressed to Director, JREDA. This envelope should contain the following :

1. It should contain only Performa as prescribed at **Annexure-5** duly filled, signed and stamped by authorized signatory of the bidder.

**6.10** In case of any contradictions between the prices mentioned in figures and words, the prices mentioned in words shall be considered final. Also, in case of any arithmetical error in regard to the total amount and individual rates, the individual rates shall be taken as final and the total amount shall be adjusted accordingly.

**6.11** The price bid should not contain any technical matter or other matter except price. The date of opening of the price bid will be notified after opening of Technical bid.

**6.12 Part-I and Part –II** of the bid document should be sealed in a third envelope. The third envelope should be sealed and super scribed (i) NIT No., (ii) "Offer for Supply of SSLS (CFL based)" (iii) Name and address of the contact person of the bidding firm, and (iv) Should be addressed to Director, JREDA, 3rd Floor, S.L.D.C. Building, Kusai Colony, Doranda, Ranchi-834002.

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

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 the document had no authority to do so, JREDA may, without prejudice to other civil and criminal remedies, cancel the bid/contract and hold the signatory liable for all costs and damages. For this purpose Power of Attorney in the Performa as prescribed at **Annexure-11** shall be submitted.

## **8.0 No Claim or Compensation for Submission of Tender**

The bidder whose bid is not accepted shall not be entitled to claim any costs, charges or expenses in connection with his submission of bid, even though JREDA may decide to withdraw the Notice Inviting Tender.

## **9.0 Validity of Offer**

Unless otherwise specified, the bidder shall keep his offer valid initially for a period of Six months from the last date of submission of the bid.

### **10.0 Five Years Comprehensive Maintenance Contract (CMC)**

The SSLS system contract price includes the provision of 5 years mandatory Comprehensive Maintenance Contract (CMC). To ensure long term sustainability of the system, the bidder should provide his representatives name, full address, mobile number and photographs to JREDA with one hard copy as well as the names and contact details of all technicians should also be provided.

The Comprehensive Maintenance Contract shall include servicing & replacement guarantee for parts and components (such as battery, electronics, Inverter, PV modules and other hardware) of SSLS for five years from the date of installation. **PV modules shall be warranted for 25 years.** Battery should be warranted for a minimum life of 5 years. The date of CMC maintenance period shall begin on the date of actual commissioning of SSLS. It is mandatory for the contractor to carry out CMC regularly and submit report to JREDA quarterly.

### **11.0 Preventive/Routine Maintenance**

This shall be done by the supplier/contractor at least once in every three months and shall include activities such as, cleaning and checking the health of the SPV system, cleaning of module surface, topping up of batteries, tightening of all electrical connections, regular checks to identify any leakage of electricity, changing of tilt angle of module mounting structure, cleaning & greasing of battery terminals and any other activity that may be required for proper functioning of the Solar Photovoltaic Power Plant. The maintenance record should be kept properly and to be submitted at JREDA office time to time. CMC documents should be certified by Beneficiary.

### **12.0 Breakdown / corrective Maintenance**

Whenever a complaint is lodged by the user the bidder shall attend the same immediately. It is clarified that effective CMC means that the bidder should ensure 24 hours smooth working of all the solar street lighting throughout the CMC period and therefore, if any complaint in this level of service is found by the JREDA officials and if the bidder do not attempt the rectification of any such defect within three days of communication of such complaint to the bidders, the bidder will be liable for a penalty of Rs. 50 per day beyond three days of reporting of such complaint.

### **13.0 Other Terms & Conditions**

- 13.1** Insertion, post-script, addition and alteration 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 NIT 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 bid and/or 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 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** JREDA 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** No postal transaction shall be entertained for obtaining bid documents.
- 13.9** Estimated Rate for CFL based solar Street Lighting System is Rs. 19990 per Street Lighting System for specification as given in Bid based on letter no. 5/23/2009-P&C(Pt. iii) dated 30.05.2013 of MNRE, GOI, New Delhi. Rate quoted below 10% of the estimated cost shall be liable for rejection.
- 13.10** Issuance of bid documents shall not construe that the bidders would be automatically considered qualified.
- 13.11 For any clarification with respect to the specification and other allied technical details of the article included in the tender enquiry document Sri S. Jha, E.E.E. (9546098608) or Arvind Kumar, Project Director JREDA (Mobile No. 9431102540) may be contacted during office hour through written request latest by 25<sup>th</sup> March 2014. Request made after the date will not be considered.**

**General Terms & Conditions**

**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

**1.0 Introduction**

The instruction/information contained in the bid documents are for guidance and compliance of the intending bidder. Bidders are advised to obtain clarification from JREDA, if any, prior to submission of their bid, failing which it will be deemed that the stipulation made in the bid documents have been read, understood and are acceptable to the bidder.

Bidder shall bear all costs associated with the preparation and submission of the bid, journeys undertaken by them and subsequent bidding process till the award of the order to successful bidder and the JREDA shall in no case, shall be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

**2.0 Scope of work**

The Scope of work for **CFL based Solar Street Lighting System** includes **Manufacturing, Supply, Installation and Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Indigenous CFL Based Solar Street Lighting Systems (SSLSs) under Solar Photovoltaic Programme 2013-14 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis** complete set in all respects along with one set of operational instruction cum maintenance manual (both English and Hindi) for each set and delivery on FOR destination/site (door delivery) basis across the State of Jharkhand as per the direction of JREDA. The list of destinations/consignees will be given to the successful bidder by JREDA before the start of dispatch.

**3.0 Bid documents**

Tender documents shall comprise of all the documents mentioned in this Bid. In addition to these any other documents/amendments/revisions or instructions issued by JREDA from time to time to bidders till due date of opening of the offers, shall also be deemed to be integral part of the bid document.

**4.0 Price**

The bidder shall quote his price as per schedule of items of work. The contract price rates shall be firm and binding and shall not be subject to any variation except for statutory variation of taxes and duties during the contractual completion period. ***The price shall be inclusive of all taxes, duties and levies including Jharkhand Vat etc. as on the opening date of tender.*** The price shall also include designing, manufacturing, inspection, supply, transport, insurance, handling etc. All applicable charges for taking necessary clearance such as commercial tax, road permit etc. wherever required are also deemed to be included in the contract price.

## **5.0 Inspection of the factory and Tests**

JREDA reserves the right to inspect manufacturer's works/factory to ascertain the capability/availability of necessary equipment and infrastructure required for manufacture of the items offered. JREDA shall have the access and right to inspect the work or any part thereof at any stage and to test the goods to confirm their conformity to the technical specifications. Successful bidder shall inform JREDA at least 15 days in advance of schedule dispatch for technical sample audit.

## **6.0 Payment terms and conditions**

Subject to any deduction which JREDA may be authorized to make under this contract, the contractor shall be entitled to payment as follows:

- (a) **60%** of the Contract Price shall be paid against supply and delivery of goods in full and in good condition as certified by Consignee & JREDA Officials after submission of following documents:
  - i. Original Commercial invoice raised from the state of Jharkhand for the supply made in triplicate (1+2).
  - ii. Copy of duly raised delivery challan / transportation challan /lorry receipt.
  - iii. Duly filled **Annexure-10** should be submitted in three sets (one for Consignee record, one for JREDA Hq. and one for JREDA's field Executive Engineer).
  - iv. Photographs of all the equipment (materials) at destination with signature & seal of Consignee & JREDA Officials. This record should be kept in the office of Consignee for verification.
  - v. Copy of Insurance Policy.
- (b) **30%** of the Contract Price shall be paid against Installation, Testing & Commissioning after submission of following documents:
  - i) Copy of Original Commercial invoice raised at the time of supply in triplicate (1+2).
  - ii) Duly filled **Annexure-10**.
  - iii) Certificate for minimum seven days of satisfactory performance.
- (c) Rest **10%** of the Contract Price shall be paid @ **2%** of the Contract Price on completion of every one year period of the 5 year CMC period, after submission of following documents:
  - i) Copy of Original Commercial invoice raised at the time of supply in triplicate (1+2).
  - ii) Submission of quarterly reports of CMC undertaken by the manufacturer.

The payment for the items to be procured/installed will be released on receipt of the corresponding share as has been provided in the approved scheme of JREDA either from MNRE, Govt. of Jharkhand, beneficiary or other concerned.

**"The efforts will be made by JREDA to make available the 100% payment to the supplier within 3 months of the date of supply".**

## **7.0 Dispatch Instructions**

All items/equipments shall be subject to pre-dispatch inspection by JREDA or its authorized representatives before their dispatch. The manufacturer will submit test report with regard conformity to technical specifications for the items to be dispatched to JREDA. However, equipments will be dispatched only after the receipt of "Dispatch Clearance" from JREDA after acceptance of test report. No consignment shall be dispatched without the receipt of dispatch clearance from JREDA. The items which are being procured through this bid have to be distributed/installed on the basis of demand to be received by JREDA. Therefore, JREDA does not take responsibility that it will procure 100% quantity as has been indicated in the bid. Further, as JREDA will receive the demand, the supply order shall be placed to the successful bidder for execution in due time.

After finalization of the tender JREDA authority will take decision for issuing L.O.I. for the work under scope to the successful bidder; and thereafter on the basis of demands received in the JREDA office. request for supply/ installation will be communicated. Then within 2 months period the supplier will have to ensure pre dispatch inspection from JREDA and within next 30 days JREDA will issue Dispatch instruction. Accordingly the work of supply & installation will be completed by the vendor within 90 days period from the date of issue of dispatch instruction.

## **8.0 Liquidated Damages for Delay in Completion**

If the supplier fails 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 JREDA and/or to fulfill his obligations in time under the contract, he shall be liable to pay to JREDA @0.5% per week maximum up to 10% of work value delayed beyond contract period.

## **9.0 Risk & Cost:**

If the contractor fails to complete the awarded work up to extended period of one year from the scheduled date of completion then JREDA will be at liberty to cancel the said work order and will get the full or part of left over work to be completed by way of engaging alternate contractor and completion of the said work shall be got completed at risk & cost of the failed contractor and failed contractor shall be liable to pay all the dues to JREDA.

## **10.0 Insurance**

The supplier shall arrange for transit and erection insurance of the materials & equipments for setting up of Solar Photovoltaic System.

## **11.0 Assignment/ Sub-letting**

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

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

## **12.0 Completeness of Tender**

All fittings, assemblies, accessories, hardware items etc. & safety and protection devices as required shall be deemed to have been included in the tender, whether such items are specifically mentioned in the BoM or not.

### **13.0 Compliance with Regulations**

The supplier/contractor shall comply with all applicable laws or ordinances, codes approved standards, rules and regulations and shall procure all necessary municipal and/or other statutory bodies and government permits & licenses etc. at his own cost. The contractor shall leave the purchaser, Director, JREDA harmless as a result of any infractions thereof.

### **14.0 Agreement**

The successful qualified suppliers shall have to enter into an agreement in the office of the Director, JREDA, in prescribed format before commencement of supply.

### **15.0 Income Tax / VAT**

Without prejudice to the obligations of the supplier under law, any income tax and VAT which JREDA may be required to deduct by law/statute, shall be deducted at source and shall be paid to income tax authorities on account of the supplier. JREDA shall provide the supplier a certificate for such deductions of tax.

### **16.0 Training Program, After Sales Service and Availability of Spare Parts:**

**16.1** The responsibility of organizing training program for SSLS will rest on the successful bidder. The training program will be organized in consultation with JREDA/Consignee. The training program will focus on operation and maintenance of SSLS. Printed leaflet/literature should be made available in Hindi by the Supplier regarding the operation and maintenance of their SSLS.

**16.2** The Supplier shall depute authorized Service Engineer within 7 days from the date of the intimation of fault, and establish sufficient inventory of spares in the State in consultation with JREDA to provide satisfactory and uninterrupted services during the warrantee period.

### **17.0 Force Majeure conditions**

In the event of either party being rendered unable by force majeure to perform any obligation required to be performed by them under this agreement, relative obligation of the party affected by such force majeure shall be treated as suspended during which force majeure condition last.

The term force majeure shall have herein mean riots (other than among the contractor's employee), civil commotion, war (whether declared or not), invasion, act of foreign enemies hostilities, rebellion, insurrection, military coup to usurp power, act of god such as earthquake, lightening, floods, fires not caused by contractor's negligence and other cause which the contractor has no control and accepted as such by the Director, JREDA, whose decision shall be final and binding.

If the work is suspended by force majeure conditions lasting for more than 45 days, the purchasers shall have the option of canceling this contract in whole or part thereof, at its discretion. The contractor shall not claim for compensation for force majeure conditions.

### **18.0 Jurisdiction of the Court**

All disputes would be settled within Ranchi jurisdiction of court of law only.

**Technical Specification**  
**COMPACT FLUORESCENT LAMP (CFL) BASED**  
**SOLAR STREET LIGHTING SYSTEM**

A stand-alone solar photovoltaic street lighting system (SSLS) 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 box. The luminaire is based on Compact Fluorescent Lamp (CFL) 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 placed in a box attached to the pole.

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.

**BROAD PROFORMANCE SPECIFICATIONS**

|                        |  |
|------------------------|--|
| PV Module              | 74 Wp under STC  |
| Battery                | Lead acid Tubular Flooded or Tubular GEL / VRLA ,<br>12V- 75 AH @ C/10 |
| Light Source           | Compact Fluorescent Lamp of 11 Watt                                    |
| Light Out put          | 900±5 % lumens.  |
| Mounting of light      | Minimum 4 metre pole mounted   |
| Electronics Efficiency | Minimum 85% total  |
| Inverter               | Quasi sine wave or sine wave type                                      |
| Duty Cycle             | Dusk to dawn   |
| Autonomy               | 3 days or Minimum 42 operating hours per permissible discharge         |



## TECHNICAL DETAILS

### PV MODULE

- (i) Indigenously manufactured PV module should be used.
- (ii) The PV module should have crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II / BIS 14286 from an NABL or IECQ accredited Laboratory. In case the certificate for the offered module is not available, a test certificate for higher capacity module produced by the same PV module manufacturer should be available.
- (iii) The power output of the module(s) under STC should be a minimum of 74 Wp at a load voltage\* of  $16.4 \pm 0.2$  V. Either two modules of minimum 37 Wp output each or one module of 74 Wp output should be used.
- (iv) The open circuit voltage\* of the PV modules under STC should be at least 21.0 Volts.
- (v) **The module efficiency should not be less than 14 %.**
- (vi) The terminal box on the module should have a provision for opening it for replacing the cable, if required.
- (vii) The PV module must use a RF Identification tag (RFID), which must contain the following information:
  - i. Name of the manufacturer of PV Module
  - ii. Model or Type Number
  - iii. Serial Number
  - iv. Month and year of the manufacture
  - v. I-V curve for the module
  - vi. Peak Wattage of the module at 16.4 volts
  - vii.  $I_m$ ,  $V_m$  and FF for the module
  - viii. Unique Serial No and Model No of the module

### **RFID shall be Optional inside the module laminate.**

- (viii) **A distinctive serial number starting with NSM will be engraved on the frame of the module or screen printed on the tedlar sheet of the module.**

\*The load voltage and Voc conditions of the PV modules are not applicable for the system having MPPT based charge controller

- ix. Monogram of JREDA along with following details translated into Hindi language in Devnagari script shall be screen printed in indelible ink or paint on the back side of PV module:
  - Solar Photovoltaic Programme-2013-14
  - Not for sale or transfer
  - Statutory action would be taken by JREDA, if it found sold or transferred under different Sections of IPC.

### BATTERY

- i. Lead Acid, tubular positive plate flooded electrolyte or Gel / VRLA Type.
- ii. The battery will have a minimum rating of 12V, 75 Ah at C/10 discharge rate.
- iii. 75 % of the rated capacity of the battery should be between fully charged and load cut off conditions.
- iv. Battery should conform to the latest BIS/ International standards.

## **LIGHT SOURCE**

- (i) The lamp should be 11 Watt compact fluorescent lamp (CFL) with 4 pins along with proper pre-heating circuit.
- (ii) The light output from the lamps should be around  $900 \pm 5$  % lumens.
- (iii) The lamp should be housed in an assembly suitable for outdoor use, with a reflector on its back.

No blackening or reduction in the lumen output by more than 10%, should be observed after 1000 ON/OFF cycles - two minutes ON followed by four minutes OFF is one cycle.

## **ELECTRONICS**

- i. The total electronic efficiency should be at least 85%.
- ii. The inverter should be of quasi sine wave/ sine wave type, with frequency in the range of 20 - 30 KHz.
- iii. Electronics should operate at 12 V and should have temperature compensation for proper charging of the battery throughout the year.
- iv. The idle current consumption should be less than 5 mA.
- v. The PV module itself should be used to sense the ambient light level for switching ON and OFF the lamp.
- vi. The PCB containing the electronics should be capable of solder free installation and replacement.
- vii. Necessary lengths of wires/cables, switches suitable for DC use and fuses should be provided.

## **ELECTRONIC PROTECTIONS**

- i. Adequate protection is to be incorporated under "No Load" conditions e.g. when the lamp is removed and the system is switched ON.
- ii. The system should have protection against battery overcharge and deep discharge conditions.
- iii. Fuse should be provided to protect against short circuit conditions.
- iv. Protection for reverse flow of current through the PV module(s) should be provided.
- v. Electronics should have temperature compensation for proper charging of the battery throughout the year.
- vi. Adequate protection should be provided against battery reverse polarity.
- vii. Load reconnect should be provided at 80% of the battery capacity status.

## **MECHANICAL COMPONENTS**

- i. A corrosion resistant metallic frame structure should be fixed on the pole to hold the SPV module.
- ii. The frame structure should have provision to adjust its angle of inclination to the horizontal between 0 and 45, so that the module can be oriented at the specified tilt angle.
- iii. The pole should be made of Galvanised Iron (GI) pipe dia OD 70 mm, ID 65 mm.
- iv. The total height of pole should be 4.5 meter (0.5 meter grouted in concrete as per standard norms under the earth, 4 meter above the ground).
- v. The pole should have the provision to hold the luminaire.
- vi. The lamp housing should be water proof and should be painted with a corrosion resistant paint.
- vii. A vented, acid proof and corrosion resistant metallic box with a locking arrangement for outdoor use should be provided for housing the battery. In case of metallic box for battery the same should be made of minimum 0.75 mm thick M.S sheet with acid proof corrosion resistant paint.

## 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.

## QUALITY AND WARRANTY

- i. All the components and parts used in the solar street lighting systems should conform to the latest BIS or IEC specifications, wherever such specifications are available and applicable.
- ii. **The street lighting system including the battery will be warranted for a period of five years from the date of supply.**
- iii. **The PV module(s) will be warranted for a minimum period of 25 years from the date of supply.** The PV modules must be warranted for their output peak watt capacity, which should not be less than 90% at the end of Ten (10) years and 80% at the end of Twenty five (25) years.
- iv. The Warranty Card to be supplied with the system must contain the details of the system.

## OPERATION and MAINTENANCE MANUAL

An Operation, Instruction and Maintenance Manual, in English and Hindi language, should be provided with the Solar Street 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.
- Type, Model number, Voltage & capacity of the battery, used in the system.
- The make and wattage of the CFL used in the lighting system.
- About Charging and Significance of indicators.
- Clear instructions about erection of pole and mounting of PV module (s) and lamp housing assembly on the pole.
- Clear instructions on regular maintenance and trouble shooting of the Solar Street Lighting System.
- DO's and DONT's.
- Name and address of the contact person for repair and maintenance, in case of non-functionality of the solar street lighting system.

**Format for Covering Letter**

**NIB No: 32/JREDA/SPV/SSLs (CFL) / 2013-14**

(To be submitted in the official letter head of the company)

To,

The Director,  
Jharkhand Renewable Energy Development Agency  
3rd Floor, S.L.D.C. Building,  
Kusai Colony, Doranda,  
Ranchi - 834002.

**Sub: Manufacturing, Supply, Installation and Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Indigenous CFL Based Solar Street Lighting Systems (SSLs) under Solar Photovoltaic Programme 2013-14 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis.**

Sir,

We are hereby submitting our offer in full compliance with the terms and condition of the above NIB No. A blank copy of the tender, duly signed on each page is also submitted as a proof of our acceptance of all specifications as well as terms & Conditions. We have submitted the requisite amount of "Earnest Money" in the form of Bank Guarantee, valid for twelve months.

The tender is submitted in two separate and sealed envelopes marked **Part-I Technical Bid & Part-II Financial Bid.**

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

**Check List of Technical bid****NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

| S. No. | Particulars  | Yes / No | Flag No.*      |
|--------|--|----------|----------------|
| 1      | Covering Letter as per <b>Annexure-1</b> .   |          | I              |
| 2      | Information about the Bidder as per <b>Annexure-6</b> .  |          | II             |
| 3      | The bidder is registered PV System Integrator or Manufacturing company of SPV cells or PV Modules or Battery or PV System Electronics confirming to relevant National/International Standards (Attach relevant certificates of Industry Department or MNRE). |          | III            |
| 4      | To indicate the functionality of the firm attach the balance sheet of last three years ending 31.03.2012 of the firm duly certified by statutory Auditor.  |          | IV/V/VI        |
| 5      | Registration certificate of MSME of Jharkhand State (Enclose certificate issued by Industry Department, Govt. of Jharkhand).   |          | VII            |
| 6      | The proof of supply of solar system in any SNA/Govt. organization/PSU in the last Five years as per <b>Annexure-4</b> to indicate the quantity already supplied. Attach copy of the order and certificate indicating its successful execution.               |          | VIII/IX Series |
| 7      | IEC/IS certificates for Solar PV Module (Attach relevant certificate).   |          | X              |
| 8      | Test certificate for solar Street Lighting System from the authorize test centers of MNRE (attach valid test certificate issued in the name of bidder)   |          | XI             |
| 9      | Certificate of Battery (Attach valid certificate).   |          | XII            |
| 10     | A copy of valid VAT/ TIN registration certificate  |          | XIII           |
| 11     | Average Annual Turnover for last three years ending 31.03.2012./ 2013 (Attach average annual turnover certificate as per <b>Annexure-12</b> )  |          | XIV            |
| 12     | Net worth as on 31.03.2012 / 2013. (Attach proof & Net worth certificate as per <b>Annexure-13</b> )   |          | XV             |
| 13     | Details of tender document fee (Bank Draft No. and Date)   |          | XVI            |
| 14     | Details of Earnest money(Bank Guarantee No. and Date) As per <b>Annexure-9</b> .   |          | XVII           |
| 15     | Technical Details as per <b>Annexure-8</b> .   |          | XVIII          |
| 16     | Declaration by Bidder as per <b>Annexure-7</b> .   |          | XIX            |
| 17     | Product Leaflet/Catalogue (if any).  |          | XX             |
| 18     | Technical Detail of SSLS (CFL) of Bidder as per <b>Annexure-3</b> .  |          | XXI            |
| 19     | Authority Letter for Signing Bid Document & Attending Bid Opening Meeting as per <b>Annexure-11</b> .  |          | XXII           |
| 20     | Format for Quarterly CMC Format <b>Annexure-14</b> .   |          | XXIII          |
| 21     | Confirm whether you have prepared all the document in a spiral binding & all pages have been serially numbered.  |          |                |

**\* Please flag the annexure and write flag number as in the box.**

**Please ensure:**

- i) That all information is provided strictly in the order mentioned in the check list mentioned above.
- ii) Bidders are advised to strictly confirm compliance to bid conditions and not to stipulate any deviation/conditions in their offer. Subsequent to bid submission, JREDA may or may not seek confirmations/clarifications and any offer(s) not in line with Bid conditions shall be liable for rejection.
- iii) Any clarification/confirmation bidder may require shall be obtained from JREDA before submission of the bid. 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.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

**Format for Technical Details**

**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

To,

The Director,  
Jharkhand Renewable Energy Development Agency  
3rd Floor, S.L.D.C. Building,  
Kusai Colony, Doranda,  
Ranchi - 834002

Dear Sir,

**Sub: Manufacturing, Supply, Installation and Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Indigenous CFL Based Solar Street Lighting Systems (SSLSs) under Solar Photovoltaic Programme 2013-14 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis.**

| <b>SL. No.</b> | <b>Particulars</b>                            | <b>Details</b> |
|----------------|---|----------------|
| 1              | Make of Solar Module (Attach IEC Certificate) | :              |
| 2              | Weather resistant HDPE Junction Box (IP65)    | :              |
| 3              | Nominal Voltage                               | :              |
| 4              | Operating Voltage of Solar Module (nom)       | :              |
| 5              | Peak Power Voltage (Vmp)                      | :              |
| 6              | Peak Power Current (Imp)                      | :              |
| 7              | Open Circuit Voltage (Voc)                    | :              |
| 8              | Short Circuit Current (Isc)                   | :              |
| 9              | Make of Battery and Origin                    | :              |
| 10             | Type of Battery                               | :              |
| 11             | Battery Rating (Voltage & AH)                 | :              |

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

**Details of Orders Received and Executed in Last 5 Years**

**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

Details of Orders Received & Executed by the Manufacturer/Supplier for Supply of **SSLS** to SNA/ Govt. Organization during Last Five Years.

| <b>SL. No.</b> | <b>Name of Agency/ Organization</b> | <b>Purchase Order No., Date &amp; Ordered Qty.</b> | <b>Name of Model</b> | <b>Delivery Schedule</b> | <b>Qty. Supplied Within Delivery Schedule</b> | <b>Qty. Supplied After Delivery Schedule</b> | <b>Date of Full Supply</b> |
|----------------|-------------------------------------|--|----------------------|--------------------------|---|--|----------------------------|
|                |                                     |  |                      |                          |   |  |                            |

Yours faithfully,

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Note:

- (a) Attach Photocopies of Purchase Orders
- (b) Attach Photocopies of Certificate of Satisfactory Performance Issued by Concerned Nodal Agency/PSU/ Govt. Organization
- (c) Separate sheet may be used for giving detailed information in seriatim duly signed. This bid Proforma must be submitted duly signed in case separate sheet is submitted

**Price Bid**

**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

| S. No.   | Description   | Total Bid Quantity | Price in Rupees  |                   |
|----------|---|--------------------|------------------|-------------------|
|          |   |                    | Unit Price (Rs.) | Total Price (Rs.) |
| <b>1</b> | <b>2</b>  | <b>3</b>           | <b>4</b>         | <b>5=3X4</b>      |
| 1        | Supply, Installation, Testing and Commissioning of CFL Based Solar Street Lighting System (SSLS) as per the Bid Document. |                    |                  |                   |

- 1 Quoted Price should not below 10% estimate cost. Above quoted price for CFL based SSLS are complete in all respect as per Technical Specifications inclusive of all Central/State/Local taxes & duties, packing, forwarding, transit insurance, loading & unloading, transportation & other charges etc. FOR destination at any site in Jharkhand and inclusive of installation, testing, commissioning, performance testing and training.
- 2 Certified that rates quoted for SSLS are as per specifications, terms & conditions mentioned in the bid document.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

(This bid Performa must be submitted duly signed in case separate sheet is submitted)



**Information About The Bidding Firm****NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

(To be submitted in the official letter head of the company)

| <b>SL. No.</b> | <b>Particulars</b>   |  |
|----------------|--|--|
| 1.             | Name of the Bidder   |  |
| 2.             | Address of Bidder with Telephone, Fax, email   |  |
| 3.             | Address of the Registered Office   |  |
| 4.             | Address of the works   |  |
| 5.             | GPS Co-ordinate of Registered Office   |  |
| 6.             | GPS Co-ordinate of Factory Campus  |  |
| 7.             | Name & Designation of Authorized Signatory for Correspondence (Attach Power of Attorney as per <b>Annexure-11</b> )                        |  |
| 8.             | Nature of Firm (Proprietorship/Partnership /Pvt. Ltd./Public Ltd. Co./Public Sector)   |  |
| 9.             | Permanent Account Number (PAN)/TIN (Attach proof)  |  |
| 10.            | Firm's Registration Number (Attach proof)  |  |
| 11.            | Sales Tax/Value Added Tax Registration Number (Attach proof)   |  |
| 12.            | Specify the Item Originally Manufactured (SPV module/Electronics/Battery) (Attach copy of Registration Certificate of Industry Department) |  |
| 13.            | Details of in-house testing facility (Attach Proof)  |  |
| 14.            | Office/ Dealer and Service network in Jharkhand with TIN No.(Give details)   |  |
| 15.            | Quoted quantity  |  |
| 16.            | Particulars of Earnest Money   |  |
| 17.            | Place where Materials will be Manufactured   |  |
| 18.            | Place where Materials will be Available for Inspection   |  |
| 19.            | Other details and remarks, if any  |  |

Yours faithfully,

(Signature of Authorized Signatory)

Name :

Designation :

Company seal :

(Separate sheet may be used for giving detailed information duly signed)

**Declaration by the Bidder**

**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

(To be submitted in the official letter head of the company)

I/We \_\_\_\_\_ (here in after referred to as the Bidder) being desirous of tendering for the rate contract for work under the above mentioned tender and having fully understood the nature of the work and having carefully noted all the terms and conditions, specifications etc. as mentioned in the tender document, DO HEREBY DECLARE THAT

1. The Bidder is fully aware of all the requirements of the tender document and agrees with all provisions of the tender document.
2. The Bidder is capable of executing and completing the work as required in the tender.
3. The Bidder accepts all risks and responsibilities directly or indirectly connected with the performance of the tender.
4. The Bidder has no collusion with any employee of JREDA or with any other person or firm in the preparation of the bid.
5. The Bidder has not been influenced by any statement or promises of JREDA or any of its employees, but only by the tender document.
6. The Bidder is financially solvent and sound to execute the work.
7. The Bidder is sufficiently experienced and competent to perform the contract to the satisfaction of JREDA.
8. The information and the statements submitted with the tender are true.
9. The Bidder is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central Government that may affect the work, its performance or personnel employed therein.
10. The Bidder has not been debarred from similar type of work by any SNA/ Government Dept. /PSU.
11. This offer shall remain valid for Six months from the date of opening of the tender.
12. The Bidder gives the assurance to execute the tendered work as per specifications terms and conditions.
13. The Bidder confirms the capability to supply and install required no. of systems per month.
14. The Bidder accepts that the earnest money be absolutely forfeited by JREDA if the Bidder fails to undertake the work or sign the contract within the stipulated period.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

**Technical Detail Form****NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

(To be submitted in the official letter head of the company)

**Warrantee Card**

|    |  |  |
|----|--|--|
| 1. | Name & Address of the Manufacturer/ Supplier of the System                             |  |
| 2. | Name & Address of the Purchasing Agency  |  |
| 3. | Date of Supply of the System   |  |
| 4. | Details of PV Module(s) Supplied in the System   |  |
|    | (a) Name of the Manufacturer   |  |
|    | (b) Make   |  |
|    | (c) Model  |  |
|    | (d) Serial No.   |  |
|    | (e) Wattage of the PV Module(s) under STC  |  |
|    | (f) Guarantee Valid Up To  |  |
| 5. | 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 at C/20 or C/10<br>Rated at 27°C                             |  |
|    | (g) Guarantee Valid Up To  |  |
| 6. | Details of Electronics & Other BOS Items   |  |
|    | (a) Name of the Manufacturer   |  |
|    | (b) Make   |  |
|    | (c) Model  |  |
|    | (d) Serial No(s).  |  |
|    | (e) Month & Year of Manufacture  |  |
|    | (f) Guarantee Valid Up To  |  |
| 7. | Designation & Address of the Person to be Contacted for Claiming Warrantee Obligations |  |

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

**Filling Instructions:**

1. The SSLS components will be generally guaranteed as per General Terms & Conditions. The manufacturer can also provide additional information about the system and conditions of Guarantee as necessary. The Guarantee card to be supplied with the system must contain the details of the system supplied as per format given above.
2. During the Guarantee period JREDA/users reserve the right to cross check the performance of the systems for their minimum performance levels specified in the MNRE specifications.

**Format for Submitting Bank Guarantee for Earnest Money**

**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

(To be submitted in Rs. 100/- Non-Judicial Stamp Paper to be purchased in the name of the issuing bank)

To,

The Director,  
Jharkhand Renewable Energy Development Agency  
3rd Floor, S.L.D.C. Building,  
Kusai Colony, Doranda,  
Ranchi - 834002.

WHEREAS ..... (Supplier's name) (hereinafter referred to as "Supplier"), a company registered under the Companies Act, 1956 and having its registered office at ..... is required to deposit with you, the Purchaser, by way of Earnest Money Rs. .... (Rupees ..... only) in connection with its tender for the work with reference to Notice Inviting Bid (NIB) No. .... dated ..... as per specification and terms and conditions enclosed therein.

WHEREAS the Supplier as per "Notice Inviting Bid, point no. 3 Earnest Money" has agreed to establish a Bank Guarantee in Your favour through us valid up to ..... (date) instead of deposit of earnest money in cash.

WHEREAS you have agreed to accept a Bank Guarantee from us in ..... instead of earnest money in cash from the Supplier.

1. We ..... (Bank) hereby agree and undertake to pay you on demand the said amount of Rs. .... (Rupees ..... only) without any protest or demur in the event the Supplier/Tenderer after submission of his tender, resiles from or withdraws his offer or modifies the terms and conditions thereof in a manner not acceptable to you or expresses his unwillingness to accept the order placed and/or letter of intent issued on the Supplier/Tenderer for the work under "Notice Inviting Bid Ref. No.: **32/JREDA/SPV/SSLS (CFL) / 2013-14**".
2. Your decision as to whether the Supplier/Tenderer has resiled from or has withdrawn his offer or has modified the terms and conditions thereof in a manner not acceptable to you or has expressed his unwillingness to accept the order placed and/or Letter of Intent issued by you on the Supplier/Tenderer for the work under "Notice Inviting Bid Ref. No. : **32/JREDA/SPV/SSLS (CFL) / 2013-14**" in this regard, shall be final and binding on us and we shall not be entitled to question the same.

3. Notwithstanding anything contained in the foregoing, our liability under this Guarantee shall be restricted to Rs. .... (Rupees ..... only).
4. This Guarantee shall remain valid and in full force and effect up to ..... (Date) and shall expire thereafter unless an intimation is given to the Bank by you earlier in writing discharging us from our obligation under this Guarantee.
5. We shall not revoke this Guarantee during its currency except by your consent in writing.
6. This Guarantee shall not be affected by any change in the constitution of the Supplier/Tenderer or yourselves or ourselves but shall ensure to your benefit and be enforceable against our legal successors or assignees by you or your legal successors.
7. Notwithstanding anything contained herein above unless a demand or claim under this Guarantee is made on us in writing within six months from the date of expiry of this Guarantee we shall be discharged from all liabilities under this Guarantee thereafter.
8. We have power to issue this Guarantee under our Memorandum and Articles of Association and the undersigned who is executing this Guarantee has the necessary power to do so under a duly executed Power of Attorney granted to him by the Bank.

Signed and Delivered

For and on behalf of ..... Bank.

(Banker's Name)

Name of Bank Manager: .....

Address .....

.....

**Certificate of Delivery of Solar Street Lighting Systems received by the Consignee as Proof of Compliance by the Supplier**

**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

प्रमाणपत्र

Consignee/प्राप्त कर्ता का नाम : .....पदनाम: .....

विभाग का नाम: .....

विभाग का पता : .....

प्रमाणित किया जाता है कि सोलर फोटोवोल्टेइक कार्यक्रम के अंतर्गत ज़ेडा द्वारा अनुदानित दर पर कुल .....  
..... सोलर स्ट्रीट लाईट (CFL Based) प्राप्त किया।

इन सोलर उपस्करों की आपूर्ति मेसर्स ..... द्वारा की गई है।

Consignee/प्राप्त कर्ता का हस्ताक्षर / Seal: .....

दिनांक : .....

ज़ेडा प्रतिनिधि का प्रमाण-पत्र

यह प्रमाणित किया जाता है कि उपर इंगित सामानों का निरीक्षण Specification के अनुसार प्राप्त करके उपर इंगित प्राप्त कर्ता को सुपूर्द की जा चुकी है।

**Format of Power of Attorney for Signing Bid**

**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

**POWER OF ATTORNEY**

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

Know all men by these presents, we.....(name and address of the registered office) do hereby constitute, appoint and authorize Mr. / Ms.....(name and residential address) who is presently employed with us and holding the position of.....

as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for **All tenders notified by Jharkhand Renewable Energy Development Agency during 2013-14**, including signing and submission of all documents and providing information / Bids to Jharkhand Renewable Energy Development Agency, representing us in all matters before [Insert Name], and generally dealing with Jharkhand Renewable Energy Development Agency in all matters in connection with our bid for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

For

\_\_\_\_\_

Accepted

..... (Signature)

(Name, Title and Address of the Attorney)

**Note:** The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, lay down by the applicable law and the charter documents of the executants (s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.

**Format For Financial Requirement – Annual Turnover**

**NIB No: 32/JREDA/SPV/SSLs (CFL) / 2013-14**

[On the letterhead of Bidding Company]

To,

The Director,  
Jharkhand Renewable Energy Development Agency  
3rd Floor, S.L.D.C. Building,  
Kusai Colony, Doranda,  
Ranchi - 834002

Dear Sir,

**Sub: Manufacturing, Supply, Installation and Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Indigenous CFL Based Solar Street Lighting Systems (SSLs) under Solar Photovoltaic Programme 2013-14 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis.**

We certify that the Bidding Company had an average Annual Turnover of Rs. -----  
----- based on audited annual accounts of the last three years ending 31.03.2012/ 2013 for SPV system.

*Authorised Signatory*  
*(Power of Attorney holder)*

*Statutory Auditor*  
*(Stamp & Signature)*

Date:



**Format For Financial Requirement - Net Worth Certificate**

**NIB No: 32/JREDA/SPV/SSLs (CFL) / 2013-14**

[On the letterhead of Bidding Company]

To,

The Director,  
Jharkhand Renewable Energy Development Agency  
3rd Floor, S.L.D.C. Building,  
Kusai Colony, Doranda,  
Ranchi - 834002

Dear Sir,

**Sub: Manufacturing, Supply, Installation and Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Indigenous CFL Based Solar Street Lighting Systems (SSLs) under Solar Photovoltaic Programme 2013-14 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis.**

This is to certify that Net worth of \_\_\_\_\_ {insert the name of Bidding Company}, as on 31st March 2012 / 2013 is Rs \_\_\_\_\_. The details are appended below.

| <b>Particulars</b>   | <b>Amount (In Rs.)</b> |
|--|------------------------|
| Equity Share Capital   |                        |
| Add: Reserves  |                        |
| Subtract: Revaluation Reserve  |                        |
| Subtract: Intangible Assets  |                        |
| Subtract: Miscellaneous Expenditure to the extent not written off and carried forward losses |                        |
| Net Worth as on 31 <sup>st</sup> March 2012 / 2013   |                        |

*Authorised Signatory*  
(Power of Attorney holder)

*Statutory Auditor*  
(Stamp & Signature)

**Format for Quarterly O&M and CMC Report**

**NIB No: 32/JREDA/SPV/SSLS (CFL) / 2013-14**

[On the letterhead of Bidding Company]

To,

The Director,  
Jharkhand Renewable Energy Development Agency  
3rd Floor, S.L.D.C. Building,  
Kusai Colony, Doranda,  
Ranchi – 834002.

Dear Sir,

**Sub: Design, Manufacture, Testing, Supply, Installation & Commissioning, Operation & Maintenance of Solar Street Lighting System.**

Date of Installation.....

JREDA Dispatch Order No..... Dated.....

Place of Supply.....

| <b>S. N.</b> | <b>Place of Installed System</b> | <b>System Details</b> |  | <b>Date of Site Visit</b> | <b>O&amp;M/CMC activities undertaken by Technician</b> | <b>Name and Signature of Concerned field Officer of JREDA</b> | <b>Name and Signature of Controlling Officer of JREDA</b> |
|--------------|----------------------------------|-----------------------|--|---------------------------|--|---|---|
|              |                                  | Module No.            |  |                           |  |   |   |
|              |                                  | Battery No.           |  |                           |  |   |   |
|              |                                  | Charge Controller No. |  |                           |  |   |   |
|              |                                  | Module No.            |  |                           |  |   |   |
|              |                                  | Battery No.           |  |                           |  |   |   |
|              |                                  | Charge Controller No. |  |                           |  |   |   |
|              |                                  | Module No.            |  |                           |  |   |   |
|              |                                  | Battery No.           |  |                           |  |   |   |
|              |                                  | Charge Controller No. |  |                           |  |   |   |

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal: