


	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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**JHARKHAND RENEWABLE ENERGY DEVELOPMENT AGENCY (JREDA)**

**Plot No.-328/B, Road No.-4, Ashok Nagar, Ranchi. – 834002**

**Phone No. 2246970      FAX: 2240665      web-site: www.jreda.com**

**NOTICE INVITING BID**



**NIB NO: JREDA/SPV/1/SL/2006-2007**

Date: 07.07.06

Sealed Bids in three parts separately containing EMD (part-1), Technical & Commercial Offer (Part-II) and Price Offer (Part-III), are invited from Indian companies / firms by JHARKHAND RENEWABLE ENERGY DEVELOPMENT AGENCY, from reputed, experienced and financially sound parties for the following work, at their office.

**TABLE-1**



DESCRIPTION OF WORK	SUPPLY OF SOLAR LANTERN (SL) ON TURNKEY BASIS FOR JHARKHAND RENEWABLE ENERGY DEVELOPMENT AGENCY'S (JREDA'S) SCHEMES DURING 2006-07. TENTATIVE SCOPE WILL BE 50,000 NO. OF SOLAR LANTERNS.  MINIMUM 5000 SOLAR LANTERN SHALL BE QUOTED BY THE BIDDER.
EARNEST MONEY DEPOSIT	Rs. 2,00,000 /-(TWO LAKHS RUPEES) FOR 5000 SOLAR LANTERN. RS.1,00,000/- FOR EACH ADDITIONAL 2500 SOLAR LANTERN  RS. 1,00,000/- (FOR SSI UNITS REGISTERED IN THE STATE OF JHARKHAD) FOR 5000 SOLAR LANTERN. RS.50,000/- FOR EACH ADDITIONAL 2500 SOLAR LANTERN Rs. 10,000 /- (TEN THOUSANDS RUPEES ONLY)
COST OF BID DOCUMENT (NON-REFUNDABLE)	RS. 5,000/- (FOR THOSE SSI UNITS WHICH ARE REGISTERED IN JHARKHAD)
TIME OF COMPLETION	90 DAYS FROM THE DATE OF SIGNING OF AGREEMENT/ DATE OF ORDER
DATE OF ISSUE OF ENQUIRY	DATE: 07 – 07 – 2006.
LAST DATE AND TIME OF ISSUE OF BID	DATE: 27/07/06 TIME: 17:00 HR
LAST DATE AND TIME OF SUBMISSION OF BID	DATE: 28/07/06 TIME: 15:30 HR
DATE AND TIME OF OPENING OF BID	DATE: 28/07/06 TIME: 16:00 HR
TOTAL QUANTITY (NOS.)	50,000. (SL MODEL-II A) THIS QUANTITY MAY VARY.

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## 1. ELIGIBILITY AND QUALIFICATION CRITERIA

The bidder shall meet the following requirements:



- (i) The bidders should be a reputed supplier of Solar Lantern as well as should also be engaged in the manufacture of one or more major sub-systems (viz. PV modules or Battery or Electronics) of SPV systems. Solar Lantern of minimum lot of 1000 supplied by the bidder shall be in satisfactory working condition for a minimum period of Two years as on submission of bid
  - (ii) The bidder have supplied to any State Nodal Agency photovoltaic based solar systems of the value of at least 3.0 crores (Rs. 1.5 Crores for SSI units registered in Jharkhand) during any one of the past three years and these should have performed satisfactorily as certified by the concerned State Nodal Agencies
  - (iii) All test reports issued by SEC / OATCs for Solar Lantern conforming to the MNES 2003-2004 & 2004-2005 specifications would be considered valid for placement of orders under the 2006-07 programme
  - (iv) The net worth of the bidder during each of the last three consecutive years must be positive.
  - (v) For availing concession in cost of document during purchasing of bid document as well as for EMD, the bidder shall furnish valid SSI registration certificate issued by Govt. of Jharkhand.
  - (vi) Bidder shall furnish up-to-date Sales Tax (S.T) / Value Added Tax (VAT) clearance certificate, EPF No, and Sale Tax /Value Added Tax registration no.
2. The bidder shall submit along with bid document Audited Balance Sheets and Profit & Loss Account for the last three consecutive financial years.
  3. Bidder may submit their Offer for more than 5000 solar Lantern in multiple of 2500 Solar Lantern, subject to submission of EMD Rs 100000/ (One Lakh) for each additional 2500 set.
  4. The documentary evidence for meeting the eligibility criteria must be submitted along with offer.
  5. Cost of the bid documents (non-refundable) shall be deposited in the form of Demand Draft drawn in favour of Director, JHARKHAND RENEWABLE ENERGY DEVELOPMENT AGENCY on any Indian Nationalised Bank, payable at RANCHI, India. Bidder will purchase bid document from the office of Director, JHARKHAND RENEWABLE ENERGY DEVELOPMENT AGENCY, Plot No. -328/B, Road No. -4, Ashok Nagar, Ranchi. - 834002 after submission of cost of bid document
  6. Bid documents including Terms & Conditions and detailed specification of work shall be available on submission of demand draft from the Office of the Director of

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JHARKHAND RENEWABLE ENERGY DEVELOPMENT AGENCY from 10:00 hrs.  
To 17:00hrs (IST) on all working days starting from 10.07.06 to 27.07.06



7. Bids will be received in Sealed Cover as specified in Bid Document up to 15.30 hrs (IST) on or before 28.07.06 in the office of the undersigned.
8. Part-I (EMD) & Part-II (Technical & Commercial Part) of the bid will be opened at 16.00 hrs (IST) on 28.07.06 in the office of the undersigned.
9. If it happens to be holiday on the date of submission / opening of bids then same shall be submitted / opened on next working day at the same time & at the same venue.
10. No postal transaction shall be entertained for obtaining of Bid Documents.
11. Issuance of bid documents shall not construe that the bidders would be automatically considered qualified.
12. EMD shall be submitted in the form of Demand draft along with bid.
13. Bid documents are not transferable.
14. JREDA reserve rights to distribute the total scope of work to more than one bidder, in the way deems to fit
15. JREDA reserves the right to amend the scope of work, accept or reject any or all the offers, in part or in full or cancel/withdraw the invitation for bids without assigning any reasons whatsoever and in such case no bidder / intending bidder shall have any claim arising out of such action.
16. JREDA reserves the right to postpone the date of receipt and opening of the bids or cancel the bid without bearing any liability, whatsoever, consequent upon such decision.
17. Bidder shall submit his Permanent Account Number (PAN) copy and recent passport photographs of Managing Director and other two Directors or CEO of the company with Name and Address or photocopy of the passport.
18. The bidder shall submit the GPS Co-ordinate (Longitude & Latitude) and digital photograph of their registered office and factory campus showing their board etc.

DIRECTOR  
JREDA



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# **VOLUME-I**

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## **GENERAL TERMS & CONDITIONS**

### **1.0 INTRODUCTION**

- 1.1 The instruction/information contained in the Bid documents are for guidance and compliance of the intending Bidder. Bidder is advised to obtain, in writing, clarifications from the Jharkhand Renewable Development Agency (**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.
- 1.2 Bidder shall bear all costs associated with preparation and submission of the Bid, journeys undertaken by them, and subsequent Bidding process till award of the order to successful Bidder and the JREDA shall, in no case, be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

### **2.0 BID DOCUMENTS**

- 2.1 Bid documents shall comprise of various Proforma and Tables as specified in Volume I and II.. In addition, any other document / instruction / amendments / revisions issued by the JREDA to the Bidder during pre-bid Conference or later till due date of submission of the offers, shall also be deemed to be integral part of the order. Failure to furnish all the information required by the bidding document in every respect will be at bidder risk

### **3.0 COST OF BID**

- 3.1 Non-refundable cost of Bid document shall be submitted by the Bidder during purchasing of bid document, in form of a Demand Draft from any Indian Nationalised Bank, drawn in favour of Director, JREDA, Ranchi.



### **4.0 Scope of Work**

The scope of work for Solar Lanterns includes manufacture, shop testing, packing & forwarding, transportation, transit insurance & supply of the system complete in all respects along with one set of user's tools & tackles kit and operation instruction manual and maintenance manual (both English and Hindi) for each set and delivery on FOR destination/site (door deliver) basis across the State of Jharkhand including, demonstration of performance and training at all sites located within the state of Jharkhand as per direction of JREDA. List of villages will be given before dispatch of supply.

### **5.0 Technical Specification**

The general technical specifications of the Solar Lantern are enclosed at **Volume -II**. The technical specifications of the Solar Lantern offered by the bidder should conform to the specifications fixed by the Ministry of Non-Conventional Energy Sources for the year

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2003-04 or 2004-05. The Test Reports issued by the SEC/ OATCs for the year 2003-04 or 2004-05 for the Solar Lantern of the bidder should correspond to the specifications for 2003-04 of MNES.

The bidder shall submit a "Compliance Certificate for meeting Technical Specifications" along with the Technical & Commercial Part: Part-II as per Proforma – III for qualification conditions. The bidder may submit the technical specifications of their Solar Lantern offered to be supplied.

## 6.0 Test Certificate

It is mandatory for the bidders to have test certificate issued by the Solar Energy Centre (SEC), Gwalpahari – Gurgaon, Haryana; or Electronics Regional Test Laboratory (East) (ERTL) Bidhan Nagar, Kolkata; or Central Power Research Institute (CPRI), Thiruvananthapuram; or Electronics Test & Development Centre, Bangalore that Solar Lantern conform to specification of MNES, Govt of India for the year 2003-04 or 2004-05. Test Certificates issued for 2003-04 / 2004-05 would be considered valid for placement of orders during 2006-07. The test reports issued prior to 2003-2004 are not valid. Bid received without test certificate with Technical & Commercial Part: Part –II will be rejected outright and no correspondence will be entertained in this regard

## 7.0 Quantity of Supply

The requirement given in the Bill of Quantity indicated below is tentative and is subject to increase or decrease depending upon the actual requirement at the time of placing order/resource available



Bidder shall submit their Offer for minimum 5000 Nos. of Solar Lantern. Bidder may also submit their offer for additional quantity in multiple of 2500 only.

In case any bidder offers less than 5,000 nos. of solar lantern his offer will be rejected.

Description	Total Quantity
<b>Solar Lantern (Model-II A)</b>	<b>50,000 (Fifty Thousand)</b>

## 8.0 Minimum Eligibility and Qualifications Criteria

- 8.1 The bidders should be a reputed supplier of Solar Lantern as well as should also be engaged in the manufacture of one or more major sub-systems (viz. PV modules or Battery or Electronics) of SPV systems. Solar Lantern of minimum lot of 1000 supplied by the bidder shall be in satisfactory working condition for a minimum period of Two years as on submission of bid

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- 8.2 Manufacturer should have valid Test Certificates issued by Solar Energy Centre/Other Authorised Test Centres, that is, either from Solar Energy Centre (SEC), Gwalpahari, Gurgaon; or Electronics Regional Test Laboratory (East) (ERTL), Kolkata; or Central Power Research Institute (CPRI), Thiruvananthapuram; or Electronics Test & Development Centre (ETDC), Bangalore tested during the year 2003-04/2004-05 for the specific model of Solar Lantern being quoted.
- 8.3 All test reports issued by SEC / OATCs for Solar Lantern conforming to the MNES 2003-2004 or 2004-2005 specifications would be considered valid for placement of orders under the **2006-07** programme.
- 8.4 Bid(s) of bidders who do not submit valid test reports for the system in terms of stipulations of as given above shall be rejected as being non-responsive.
- 8.5 The bidder should have positive net worth during past three years i.e during 2003-04, 2004-05 and 2005-06 and should have supplied to any State Nodal Agency photovoltaic based solar systems of the value of at least 3 crores (Rs. 1.5 Crores for SSI units registered in Jharkhand) during any one of the past three years and these should have performed satisfactorily as certified by the concerned State Nodal Agencies. Bidder shall submit evidences/documents of financial capability and past experience.
- 8.6 The bidder shall submit a letter in confirmation of meeting the Minimum Eligibility Conditions and qualification conditions as per Proforma – II given in the bid document.



## **9.0 Submission of Bid**

- 9.1 The Bid shall be prepared and submitted by typing or printing in English with indelible black ink on white paper in consecutively numbered pages, each page signed alongwith duly filled in format (s) as per bid document. The bidding document shall comprise the documents as stated in the bid and to specify/confirm the same in the check-list enclose in the bid document.
- 9.2 All original and amendments / revisions to Bid Documents, including minutes of meeting, issued by the JREDA, if any, shall be signed and submitted along with the Bid. The Bid submitted by the Bidder shall take into account all such amendments / revisions and minutes of meeting, if any.
- 9.3 Bidders are advised to submit their Bids strictly based on the specification, terms and conditions contained in the Bid documents and subsequent revisions / amendments, if any., the same shall also be considered as integral part of the Bid’.
- 9.4 **Bidder shall submit their offer at the office of Director, JREDA, and Plot No. – 328/B, Road No.-4, Ashok Nagar, Ranchi, Jharkhand, Phone No. 2246970 FAX: 2240665**

## **10.0 Mode of Submission**

- 10.1 Sealed bid should be submitted in three separate parts, Part-I Part-II and Part-III. Each envelope should be super-scribed on top left side indicating clearly bid notice no., SPV

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System nomenclature/type & model, due date of opening as may be, details of EMD, name & address of the bidder, fax & telephone of contact person etc. as required. These envelopes should again be sealed in a covering envelope, alongwith forwarding letter, super-scribed on top with "Offer for supply of SPV system – Solar Lantern", NIT No. Part-I, (Part-II), Price Part (Part-III), Bid Paper Purchase Receipt No., Date of opening of Part – I & II Name & address of bidder, etc. Details of Part-I, II & III given below

- a) Part-I -Earnest Money: To submit in original only.
- b) Part-II -Technical & Commercial: To submit in original plus two Copies & one soft copy in the form of Compact Disk (CD)
- c) Part-III - Price: To submit in original plus one copy

Bid shall be submitted under a covering letter indicating clearly the summary of Bid Chapters with Proforma and subsequent revisions / amendments, if any, schedules of the complete Bid.

#### 10.1.2 Part-I- EARNEST MONEY

This cover should be sealed and super-scribed “PART – I; Earnest Money,” Only one original with a covering letter shall be submitted. as per clause no.11 below . For Bidders not submitting earnest money request for concession with documentary evidence shall be submitted, failing which, the Bid shall be liable for outright rejection.

#### 10.1.3 Part-II- TECHNICAL & COMMERCIAL



This cover should be sealed and super-scribed “PART – II; TECHNICAL AND COMMERCIAL BID” followed by the title of work and Enquiry reference.

‘Technical’ and ‘Commercial’ Part of the offer shall be submitted in original plus two copies each copy shall contain 1 (one) set of the following:

- a) General terms and Conditions of Contract, Proforma, Price Schedule, Technical specification and any additional instruction or documents issued shall be duly signed and stamped on each page as a token of having been read, understood and accepted all the terms and conditions mentioned therein. A CD shall be submitted for this part.
- b) Check List shall also be submitted with Part-I.

#### CHECK LIST



I.	Forwarding letter :	: Proforma – I
II.	Minimum Eligibility Condition – qualification	: Proforma – II
III.	Compliance Certificate for meeting Technical Specifications – eligibility and qualification	: Proforma – III
IV.	Attested Photostat copy of Registration Certificate of firm/SSI /NSIC Certificate as the case may be.	
V	Copy of all valid Registration Certificate	

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VI.	Certified copies of 2004 –05 Sales Tax Clearance Certificate and Sales Tax Registration Certificate
VII.	Attested Photo-copy of Partnership Deed in case of partnership firm with the photograph & details of each partner
VIII	Power of Attorney for authorised signatory in case of companies.
IX.	Financial capability certificate from Bank/Financial Institution indicating that the manufacturer has the necessary resources for execution of the order.
X.	Proof of annual turnover for past 3 years for SPV systems including details of manufacturing capacity / facility along with testing facilities and list of items / products manufactured in house and bought-out items.
XI	Details of past experience against supply made to: <b>Proforma - VI</b> different States Nodal Agencies/JREDA
XII	Photocopies of certificate of satisfactory performance of systems supplied to state Nodal agencies along with copies of purchase orders / contracts.
XIII.	Test Certificate of Solar Lantern issued by Solar Energy Centre/MNES approved testing centres (OATCs) for the test performed during 2003-2004 or 2004-2005 as per MNES, Govt. of India specifications.
XIV.	Technical Specifications of Solar Lantern of Bidder <b>volume -II</b>
XV	Photocopy of bank draft submitted as cost of bid document.
XVI	PF Registration Certificate & PF Registration No.
XVII	A tentative overall schedule in the form of Bar Chart
XVIII	A copy of Price Schedule (without prices), duly signed & stamped, as per proforma-VII mentioning “ Quoted “ word in the column of UNIT rate and Total rate for which price is quoted and mentioning “ not quoted” for which price is not quoted.
XXI	Declaration that they have never be de-listed or banned at any time in the past by any Govt. of Public Sector undertaking.
XX	GPS Co-ordinate & address of the registered office and factory of the bidder.
XXI	No Deviation Confirmation as per <b>Proforma IX</b>
XXII	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.
XXIII	Copy of audited Balance Sheet and Profit & Loss Account for last three (3) years
XXIV	Net Worth of last three (3) years
XXV	Proof of all Tax & Duties clearance

- c) **Please 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, JREDA may not seek confirmations / clarifications and any offer(s) not in line with BID conditions shall be liable for rejection. Bidders are also requested to submit the documents / confirmations strictly as per the check list enclosed above.**

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#### 10.1.4 Part-III – PRICE

This cover should be sealed and superscripted “PART-III-PRICE BID” to be filled up exactly as per Format given in proforma-VII. This shall be filled up in both figures and words and signed on each page with stamp by authorised representative of the Bidder. Prices of each lot shall be mentioned in Words and Figures both. 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 amounts, the Individual rates shall be taken as final and the total amount shall be adjusted accordingly. Price Offer should not contain any technical or commercial offer, likewise, technical or commercial offer should not contain price of any item, such cases, even if found any where, shall not be given cognizance of.

- 10.2 JREDA shall assume no responsibility for misplacement or pre-mature opening of any part of the bid, in case above instructions are not complied with by the bidder.
- 10.3 Any offer received after the deadline for submission of offers as specified above, shall be rejected and returned unopened to the bidder.
- 10.4 All the pages of bid documents, technical specifications, bids, supporting documents, etc. shall be duly signed by the authorised signatory and company seal should be affixed on each page. Any part of the bid which is not specifically signed by the authorised signatory and not affixed with company seal shall not be considered for the purpose of evaluation.
- 10.5 The offer should be signed and sealed by the bidder or his authorised representative. The names and designations of all persons signing shall be typed or printed below the signature.
- 10.6 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.
- 10.7 Failure of 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.

#### 11.0 Earnest Money Deposit

- 11.1.1 Bidder shall submit non-interest bearing Earnest Money Deposit (EMD) of Rs. 2,00,000/- (Two Lakhs) for 5000 Solar Lantern in the form of Demand Draft from any Indian Nationalised Bank, drawn in favour of “Director, JREDA” payable at Ranchi.
- 11.1.2 Bidder shall submit additional non-interest bearing EMD of Rs. 1,00,000 for each additional 2500 Solar Lantern, if the bidder submits their offer for more than 5000 Solar lantern.

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11.1.3 Earnest Money submitted in a separate sealed envelope (PART-I) duly superscripted with the Bid Enquiry reference, Bidder's own names full address and titled "Earnest Money".

11.1.4 Small Scale Unit shall submit non-interest bearing Earnest Money Deposit of Rs 1,00,000/- for 5000 Solar Lantern in the form of Demand Draft from any Indian Nationalised Bank, drawn in favour of "Director, JREDA" payable at RANCHI. Further Bidder shall submit additional EMD of Rs. 50,000/- for each additional 2500 Solar Lantern, if the bidder submits their offer for more than 5000 Solar lantern. However, Bidders seeking concession from submission of Earnest Money, shall submit own valid Registration Certificate in the envelope titled "Earnest Money" failing which the Bid will be treated as if "submitted without exact amount Earnest Money", and will be rejected. However request for adjustment of earlier dues in place of Earnest Money Deposit shall not be entertained.

The SSI units registered in State of Jharkhand must furnish an attested photocopy of SSI unit certificate issued by Govt. of Jharkhand in this respect

11.1.5 The Earnest Money shall be returned to all the unsuccessful Bidders, within sixty days from the date of placement of LOI/Order to successful bidder.

11.1.6 In the event the Bid of any party is rejected during the course of Techno-Commercial Scrutiny and Evaluation, the Earnest Money will be returned to such Bidder.

11.1.7 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 or fails to submit the Security Deposit within specified time as per terms of the LOI/Order.


## **12.0 Validity of Offer**

The Bid and Price(s) quoted shall remain valid up to 31.03.07.

## **13.0 Opening and Evaluation of Offers**

13.1 Part-I & Pat-II: EMD and Commercial & Technical Part will be opened on Dt.28.07.06 at 16.00 PM at the office of Director, JREDA at Plot No. –328/B, Road No.-4, Ashok Nagar, Ranchi in the presence of bidders, or their authorised representative, who choose to attend the meeting. The representative should produce authorization letter to attend the bid opening meeting as given at Proforma-IV. The representative who does not produce such authorization will not be allowed to attend the bid opening.

13.2 If the EMD value submitted by the bidder does not match with the quantity offered, their offer is liable for rejection.

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- 13.2 JREDA, if required, may at its discretion obtain clarifications on offers by requesting such clarifications from any or all the bidders. Such request for clarification and the response shall be in writing.
- 13.3 JREDA shall examine whether bid is complete in all respect and conform to stipulated requirement of Technical specifications and Tests reports. The bid having material deviation shall be rejected as being non-responsive.
- 13.4 The Part – III: Price Part of each lot of only those bidders, whose offers are technically and commercially acceptable after evaluation of the Technical and Commercial Part, will be opened and evaluated. The date & time for opening of Part-II: Price Part will be uploaded in JREDA web-site. **Bidders are requested to visit the web-site ([www.jreda.com](http://www.jreda.com)) regularly and keep themselves informed.** The Price Part will be opened at the office of Director, JREDA at Plot No. –328/B, Road No.-4, Ashok Nagar, Ranchi as intimated, in the presence of eligible bidders or their authorised representative. The authorised representative will be allowed to attend the opening on production of authorization letter.
- 13.5 The prices shall be evaluated for the entire quantity quoted by the bidders. Unit landed price (inclusive all taxes, duties, freight, insurance etc) will be evaluated and bidders shall be ranked. The bidder who has quoted the lowest evaluated rate shall be offered the quantity quoted. All the other bidders shall also be requested to match the lowest evaluated rate. For the bidders who matched the lowest evaluated rate, the balance quantity (if any) will be distributed amongst the bidders ranked L2, L3, .Ln in the following manner: L2 will be offered maximum quantity quoted by them at L1 price. After that out of the balance quantity (if any) L3 will be offered maximum quantity quoted by them at the L1 rate. The process will be repeated each time with the balance quantity till all the quantities are ordered.
- 13.6 JREDA, if required, may at its discretion extend the scheduled date of opening of Price Part of bids.

### 13.7 PURCHASE PREFERENCE

JREDA shall give purchase preference to SSI Units registered within the Jharkhand as per prevailing guidelines of Govt. of Jharkhand.

### 14.0 CONTRACT PRICE

- 14.1 The total contract price of (each lot) Solar Lanterns in full and complete set including SPV module, lamp & luminaries, charge controller, control electronics, battery, mechanical components, etc. should be quoted in Proforma -VII (Price Part).
- 14.2 For Supply of items in full & good condition at FOR Site / Stores site (door delivery basis) to various consignees across State of Jharkhand, including transit insurance. Contract Price also includes all charges towards packing & forwarding, inspection

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Insurance and freight including door delivery charges. Contract Price is also inclusive of Excise Duty, CST and Sales Tax / Jharkhand VAT on the finished items, Turn Over Tax (TOT) / Octroi, Professional tax, entry tax etc. as applicable for the his supplies.

- 14.3 Contract Price shall remain firm and binding and shall not be subject to any variation, whatsoever, on any account except for statutory variation on taxes & duties during contractual completion period as stipulated in Clause no 14.4 below and / or addition or modification of scope of work.
- 14.4 Various taxes, levies and duties shall be paid against applicable documentary evidence limited to the maximum ceiling as indicated in the price schedule
- 14.5 The Contract price includes and covers the cost of all royalty and fees for all articles and processes, protected by letters, patent or otherwise incorporated in or used in connection with the work, also all royalties, rents and other payments in connection with obtaining all the materials for the work and the supplier shall indemnify and keep indemnified the JREDA, which indemnity, the supplier hereby gives against all actions, proceedings, claims, damages, costs and expenses arising from the incorporation in or use of work of any such articles, processes or supplies.
- 14.6 During the period of the contract, JREDA may order addition/ deletion in quantities/ which supplier shall comply. The adjustment in Contract Price shall be made at the same rate as per Price Schedule.
- 14.7 All applicable charges for taking statutory clearances, wherever necessary, is included in the contract price. The price shall also be inclusive of necessary charges towards supervision as applicable.

## **15.0 Terms of Payment**

The terms of Payment shall be as given below:

- a) Subject to deductions as per Clause 20.0, 85% of the contract price shall be paid against delivery of goods in full and good condition on submission of following documents:
  - (i) Commercial Invoice in triplicate
  - (ii) Copy of receipted Delivery Challan/ transportation Challan/ Lorry receipt.
  - (iii) Certificate of delivery of the system and delivery of user's tools and tackles & Operation & Maintenance Manual in terms of the Order, issued by Deputy Commissioner / Consignee's and JREDA representative.
- b) 10% of the contract price shall be paid against completion of training and awareness programme at various locations and on submission of the following documents

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- i) Commercial Invoice in triplicate
- ii) Certificate of training and awareness programme and testing of the solar lantern in terms of the Order issued by Deputy Development Commissioner (DDC) /Consignee's and JREDA representative
- c) Balance 5% shall be paid after completion of Warranty period subject to deduction due to non-performance of the supplier during warranty period and submission of following documents:
  - (i) Commercial Invoice in triplicate.
- d) All payments shall be released by JREDA within 30 days of submission of stipulated documents through account payee cheque issued in favour of the Supplier and payable at any Indian Nationalised/Scheduled Bank, Ranchi
- e) All the payments shall be paid to only successful bidder not to anyone else.

## **16.0 INCOME TAX**

Without prejudice to the obligations of the Supplier under law, any Income Tax, which JREDA 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. JREDA shall provide the Supplier a certificate for such deduction of tax.

## **17.0 VARIATION IN TAXES AND DUTIES**

- 17.1 The adjustment in the Contract Price towards imposition of new taxes or abrogation of existing taxes shall be applicable only if the new tax is enacted or existing tax is abrogated within Contractual delivery/execution period. For any 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.
- 17.2 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.
- 17.3 The adjustment in the Contract Price towards variation in the taxes shall be made by the JREDA on production of the documentary evidences by the Supplier and after completion of delivery.
- 17.4 The Contract Price shall be adjusted towards variations in taxes in respect of only finished equipment supplied by the Supplier to the JREDA. No adjustment in the Contract price shall be made for variations in the taxes on raw-materials, parts, component / intermediate components, assemblies / sub-assemblies, etc.

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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## **18.0 TRANSIT INSURANCE**

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 erection and commissioning work of the entire plant.

The resultant loss if any due to failure of supplier / sub- supplier to comply with the above shall be to the account of supplier.

## **19.0 DESPATCH INSTRUCTIONS**



- 19.1 All the items /Equipments shall be subjected to inspection by JREDA or Authorised representative as per relative Standards/ provision approved by JREDA before dispatch of items.
- 19.2 The equipment shall be despatched as per the detailed "Despatch Instructions" which will be required to be followed strictly at the time of despatch. However, equipment shall be despatched only after receipt of "Despatch Clearance" from JREDA after inspection and acceptance of the equipment is over. No consignment shall be despatched without receipt of despatch clearance from JREDA.

## **20.0 LIQUIDATED DAMAGES FOR DELAY IN COMPLETION**

- 20.1 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 and/or to fulfill his obligations in time under the Contract, he shall be liable to pay to the JREDA as agreed liquidated damages a sum equipment to ½% of total contract value per week of such delay or part thereof subject to maximum of 5% of the total contract value.
- 20.2 The liquidated damages for delayed completion shall be recovered from the Supplier's bill or Security Deposit.

## **21.0 Delivery**

The delivery of goods at FOR destination in full and completion of installation/ commissioning in terms of the contract/order shall be completed within 3 (three) months from the date of the order.

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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## **22.0 Inspection of the Factory and Tests**

- 22.1 JREDA 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 price offers of the bidders.
- 22.2 JREDA shall have the right to inspect and test the goods to confirm their conformity to the technical specifications after delivery of goods to consignee.
- 22.3 Manufactures shall inform JREDA at least 10 days in advance of schedule despatch.

## **23.0 Cancellation of Bid / Order**

The JREDA reserves the right to reject in part or full the awarded contract without assigning any reason of those firms which will be found defaulter for delayed supply or failure to deliver satisfactory performance or supply of substandard materials pursuant to clause 20.0 and 22.0.



The authority reserves the right to reject part or whole of the bid/order without assigning any reason thereof.

## **24.0 Warranty Period**

The manufacturer must provide warranty for a minimum period of two years for the Solar Lantern including the battery and minimum ten years for PV modules from the date of installation/demonstration of systems after receipt of the materials by the consignee. Supplier 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 days without any additional cost to JREDA

## **25.0 Training Programme, After-Sales Service and Availability of Spares**

- 25.1 The responsibility of organizing training programme for Solar Lantern will rest on the manufacturers. The training programme will be organized in consultation with JREDA/Consignee and Manufacturer of Solar Lantern. The training programme will focus on operation and maintenance of Solar Lantern. Printed leaflet/literature should be made available in Hindi by the manufacturer regarding the operation and maintenance of their Solar Lantern. The manufacturer will also ensure after sales service and availability of spares.
- 25.2 The supplier shall within 7 days from the date of the order depute authorised service engineer and establish sufficient inventory of spares in the state in consultation with JREDA to provide satisfactory and uninterrupted services during warranty period.

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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## **26.0 Performance Guarantee (Security) Deposit**

The successful tenderer shall submit Performance Guarantee within 15 days from the date of Letter of award in the form of Demand Draft from any Nationalized/scheduled Bank in favour of Director, JREDA payable at Ranchi for a sum equivalent of 10% (Ten Percent) after adjusting the value of EMD DD. The Performance Security shall be liable for forfeiture by JREDA in case of termination/ cancellation of the order/contract pursuant to Clause 23.0 or failure of the equipment to deliver satisfactory and acceptable performance.

## **27.0 Award of Contract/Order**

The contract/order shall be awarded to techno-commercially acceptable and lowest evaluated bidder for the quantity quoted by the bidder

## **28.0 Agreement / Contract**

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

## **29.0 Arbitration**



All disputes would be settled within Ranchi Jurisdiction of Court of Law only.  
All arbitration cases would only be settled under Arbitration and Conciliation Act 1996 but at Ranchi only.

## **30.0 Assignment**



The supplier shall not assign, in whole or part, its obligations to perform under the order/contract, without written permission of the JREDA.

## **31.0 Force Majeure**

- 31.1 Notwithstanding the provisions of Clauses 20.0 and 26.0, the Supplier shall not be liable for forfeiture of its performance security, 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.
- 31.2 For purposes of this clause, “Force Majeure” means an event beyond the control of the Supplier and not involving the Supplier’s fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the JREDA in its sovereign capacity, wars or revolutions, strikes and riots, fires, floods, epidemics, quarantine restrictions, and freight embargoes.



	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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- 31.3 If a Force Majeure situation arises, the Supplier shall promptly notify the JREDA in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

	<p style="text-align: center;"><b>BID SPECIFICATION FOR SOLAR LANTERN</b></p>	
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# VOLUME- II

## TECHNICAL SPECIFICATION

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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## TECHNICAL SPECIFICATION

### 1.0 Definition

A Solar Photovoltaic Lantern is a lighting system consisting of a lamp, battery and electronics, all placed in a suitable housing, made of metal, plastic or fiber glass, and a PV module. The battery is charged by electricity generated through the PV module. The lantern is basically a portable lighting device suitable for either indoor or outdoor lighting, covering a full range of 360 degrees. A lighting device which provides only unidirectional lighting will not be classified as a solar lantern in the present context.

### 2.0 Scope of work

The scope of work for Solar Lanterns includes manufacture, shop testing, packing & forwarding, transportation, transit insurance & supply of the system complete in all respects along with one set of user's tools & tackles kit and operation instruction manual and maintenance manual (both English and Hindi) for each set and delivery on FOR destination/site (door deliver) basis across the State of Jharkhand including, demonstration of performance and training at all sites located within the state of Jharkhand as per direction of JREDA.

The solar lantern shall be supplied as per the following specification.

### 3.0 Technical Specification

The Solar lantern should conform to the following model:-



MODEL	LAMP	BATTERY CAPACITY AT C/20 RATE	PV MODULE NO. RATING
MODEL II A	CFL 7W	12 V, 7AH	10 to 11.9 Wp.

### 3.1 Duty Cycle

The Solar lantern should provide a minimum of three hours of lighting per day under average daily solar radiation conditions of 5 kWh/sq.m. on a horizontal surface. The actual duration of lighting may vary depending on the location, season etc.

### 3.2 Lamps

- (a) The lamp will be compact fluorescent (CFL) type with a rating of 7W.
- (b) For 4-Pin type CFLs, a suitable pre-heating circuit must be provided.
- (c) The lamp should be mounted in a base up configuration.
- (d) The light output should be 370 +/- 5% lumen for 7W lamp. No blackening should be observed after 1000 ON / OFF cycles.
- (e) The lamp shall have following features.

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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- High efficiency and long operating life ( Minimum 8000hrs)
  - Reverse polarity protection
  - Automatic frequency control
- (f) The lamps should conform to relevant BIS standards.

### 3.3 Battery



- (a) The battery shall be sealed maintenance free rechargeable lead acid type. The energy generated is stored in the battery and is available to power the solar lantern for a predetermined duty cycle.
- (b) The capacity of the battery will be a minimum of 7.0 AH at 12 V at C/20 discharge rate at 20° C.
- (c) 80% of the rated battery capacity should be between the low voltage and high voltage cut-off points.
- (d) The battery shall have following features
  - Wide operating temperature range ( 0 deg.C to 50 deg C)
  - Protection against reverse connection of battery/panel, overcharge & deep discharge
  - Safety vent to prevent gas build up
  - Life up to minimum 300 full cycles at 100% capacity
  - Very low self discharge rates
  - Operate at any orientation
- (e) The Battery should have approval of ETDC/ERTL/Railway/Telecom/DRDO/CECRI.

### 3.4 Electronics

- (a) The inverter will be of quasi sine wave/sine wave type with a crest factor less than 1.7 and the frequency in the range of 20-35 KHz to drive 4pin 7 W CFL with preheat technique to avoid the blackening of ends. Half-wave operation is not acceptable.
- (b) The total electronics efficiency should be at least 80%.
- (c) No blackening or reduction in the lumen output by more than 10% should be observed after 1000 ON/OFF cycles (two minutes ON and four minutes OFF is one cycle).
- (d) The idle current (i.e. the current consumed when the lamp is switched OFF and no charging is in progress) should not be more than 1 mA.
- (e) Electronics should operate at 12 V and should have temperature compensation for proper charging of the battery throughout the year.
- (f) The PCB containing the electronics should be capable of solder free installation and placement.

### 3.5 PV Module(s)

- (a) The wattage range ( 10 to 11.9 Wp) of the PV modules should be at 16.40 Volts for specified 12V Model ( Model II A) under standard test conditions (STC).

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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The open circuit voltage of the PV modules under STC should be at least 21.0 Volts for 12 V Models.


- (b) The module should preferably have an arrangement (stand) for mounting at the optimum angle in the direction facing the sun.
- (c) In case of thin film solar cell modules, the specified values refer to the power output after the initial degradation.
- (d) The open circuit voltage of the PV modules of all the models under STC should be at least 21.0 volts.
- (e) The terminal box on the module should have a provision for opening for replacing the cables, if required.
- (f) Weatherproof enclosure shall be provided.
- (g) A strip containing the following details should be laminated inside the module so as to be clearly visible from the front side.
  - (I) Name of the Manufacturer or distinctive logo.
  - (II) Model or Type No.
  - (III) Serial No.
  - (IV) Year of make
- (h) Models of reputed make shall be offered.
- (i) Monogram of JREDA along with following details translated into Hindi language shall be embossed in Devnagari script on the left hand top corner of each PV module.
  - General Programme 2006- 07
  - Not for sale or transfer
  - Statutory action would be taken by JREDA, if it found sold or transferred.
- (j) Back side and frame of PV module shall be painted with pink colour.

### 3.6 Electronic Protection

- (a) Adequate protection is to be incorporated under no load conditions (e.g. when the lamp is removed and the lantern is switched ON).
- (b) Battery cut offs & reconnects should be provided to protect it against overcharge and deep discharge condition.
- (c) A fuse should be provided to protect against short circuit conditions.
- (d) A blocking diode, preferably a Schottky diode, should be provide as part of the lantern electronics to prevent reverse flow of current through the PV module, in case such a diode is not provided with the module itself.
- (e) Full protection against open circuit, accidental short circuit and reverse polarity should be provided.

### 3.7 Other Features

- (a) The lantern should be provided with 2 LED indicators : a green light to indicate charging in progress, and a red LED to indicate deep discharge conditions of the

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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battery. The green LED should glow only when the battery is actually being charged.

- (b) Good reliable, switches suitable for DC use are to be provided on the lantern. A cable at least 5 meters long should be provided for inter-connection between the module and the lantern. Only copper wires of appropriate gauge & dimensions as per BIS standards should be used.
- (c) The following details should be marked indelibly on the lantern :
  - Name of the Manufacturer or Distinctive Logo.
  - Model Number (this refers to Model(s) indicated in Clause III above)
  - Serial Number.
  - JREDA/2005-06
- (d) Components and parts used in solar Lantern should confirm to the latest BIS specifications, wherever such specifications are available and applicable.
- (e) Additional features such as a small white LED which function as a night lamp or a socket for powering another appliance such as radio may be provided in the lantern. However these additional feature should not interfere with the independent switching ON and OFF of the lantern

**3.8** An operation, Instruction Maintenance Manual in English & Hindi language should be provided with the solar lantern. The following minimum details must be provided in the manual:

- (a) About Photovoltaic
- (b) About Solar Lantern – its components and expected performance.
- (c) About PV Module.
- (d) About CFL
- (e) About Battery
- (f) Clear instructions about mounting of PV module(s)
- (g) About electronics
- (h) About charging and significance of indicators.
- (i) DO's and Donts
- (j) Clear instructions on regular maintenance and trouble shooting of solar lantern.
- (k) Name and address of the person or service center to be contacted in case of failure or complaint.


**3.9** Any minor equipment and material which may not be specifically mentioned in this specification but are required to make the system complete in every respect in accordance with technical specification and guaranteed performance of the equipment shall be deemed to have been covered under the scope of this specification and shall be provided by the tenderer/supplier within the quoted price.

**3.10** The Tenderer shall satisfy the purchaser that he possesses the necessary technical experience and has at his disposal suitable facilities and staff to ensure that the contract shall be executed with the best quality material and workmanship within the stipulated time. Necessary particulars in this regards shall be furnished with the Tender.



	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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- 3.11 The equipment supplied shall be new and best of their kind and of latest technology on the date. All materials and equipment shall comply with the latest MNES Standard.
- 3.12 The equipment shall be designed to have maximum reliability and ease of operation and maintenance as primary consideration. The equipment offered shall be of a family having basic design as per which other equipment have already been supplied and which have operated efficiently and reliably elsewhere at least three years under similar climatic and operating condition. Operation feed back for such plants already supplied shall be attached with the offer.

All the equipment supplied shall be guaranteed for quality workmanship and compliance with the specified requirements for integrated performance

	<p style="text-align: center;"><b>BID SPECIFICATION FOR SOLAR LANTERN</b></p>	
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## Proforma

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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In Sealed Cover Part – II & Part – III	<b>Jharkhand Renewable Energy Development Agency</b> <b>NIB No. <u>JREDA/SPV/1/SL/2006-07</u></b> <b><u>Bid Proforma - Solar Lantern</u></b> <b><u>Technical &amp; Commercial Part : Part – I / Price Part : Part – II</u></b>	<b>Proforma I</b>
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### Format for Forwarding Letter

(To be submitted by bidders on official letter-head of the company)

No.....

Dated .....

To,  
The Director  
Jharkhand Renewable Energy Development Agency  
Plot No.-328/B, Road No. –4,  
Ashok Nagar,  
Ranchi. 834002

Sub.: **Offer in response to Notice Inviting Bid No..... for manufacture, supply and maintenance of Solar Photovoltaic Systems –Solar Lantern.**

Sir,

We are hereby submitting our offer in compliance with the terms and conditions of the Notice Inviting Bid No. .... As specified, the offer has been submitted in two different envelopes duly marked and sealed. The offer is submitted in triplicate.

We also further declare:

- a) That we are submitting this offer under the above mentioned notice 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 documents.
- b) That we have never been debarred from executing similar type of work by any Central / State / Public Sector Undertakings / Departments.
- c) That we shall execute the offer/work as per specifications, terms & conditions of the Bid Documents and in exact configuration of the sample submitted on award of work.
- d) That our offer shall remain valid for placement of purchase orders up to 31.03.07

Yours faithfully,

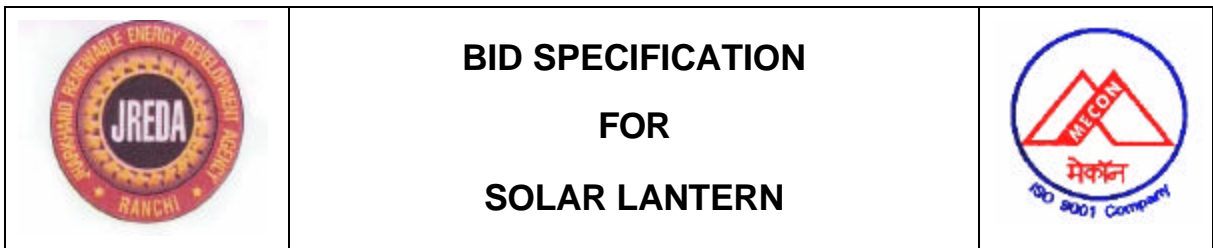
(Authorized Signatory)

Name

Designation

Company Seal

Prepared by: V. Tigga	Checked by: Dr. P. K. Maji	Approved by: B. K. Verma
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**Jharkhand Renewable Energy Development Agency**

**NIB No. JREDA/SPV/1/SL/2006-07**

In sealed Cover  
Part - II

**Bid Proforma – Solar Lantern**

**Technical & Commercial Part : Part - I**

**Proforma**

**II**

**Format for confirmation of Minimum Eligibility Condition**

(To be submitted by bidders on official letter-head of the company)

No.....

Dated .....

To,

The Director,  
Jharkhand Renewable Energy Development Agency  
Plot No. -328/B, Road No. -4,  
Ashok Nagar,  
Ranchi. - 834002

Subject: **Confirmation of meeting the Minimum Eligibility Condition for NIB No. .... for Solar Lantern**

Sir,

Having examined the Bid documents of NIB No. ...., we hereby confirm the following towards the minimum eligibility conditions to participate in the bid for Manufacture, Supply and Maintenance of Solar Photovoltaic Systems – Solar Lantern

- 1) We are indigenous manufacturers of sub-systems of SPV Systems (Module or battery or both).
- 2) We have valid test certificates from \_\_\_\_\_ (Solar Energy Centre (SEC) Gurgaon or Electronics Regional Test Laboratory (East) (ERTL), Kolkata or Central Power Research Institute (CPRI), Thiruvananthapuram or Electronics Test and Development Centre (ETDC), Bangalore) tested during the year 2004-05/2005-06 for the specific model of Solar Lantern to be supplied.
- 3) We confirm that these systems have been working satisfactorily since supply. Certificate to this effect from the concerned State Nodal Agency and other organisations is enclosed.
- 4) If any time, any of declaration is found to be false, our offer or order is liable to rejection.

Yours faithfully,

Encl. attached.

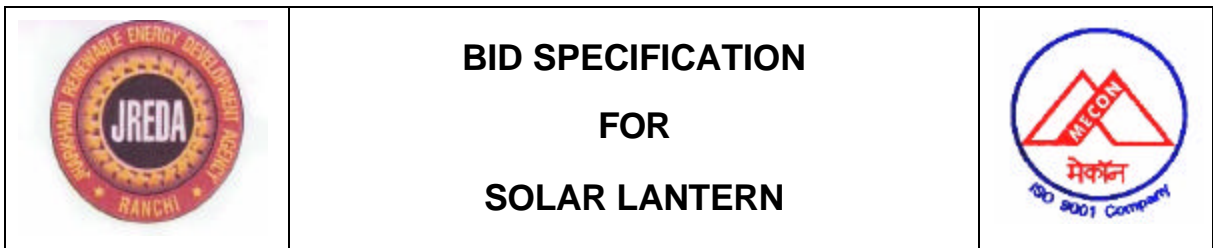
(Authorized Signatory)

Name

Designation

Company Seal

Prepared by: V. Tigga	Checked by: Dr. P. K. Maji	Approved by: B. K. Verma
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**Jharkhand Renewable Energy Development Agency**

**NIB No JREDA/SPV/1/SL/2006-07**

**Bid Proforma – Solar Lantern**

**Technical & Commercial Part : Part - I**

<b>Proforma</b>	<b>III</b>
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In sealed Cover Part -I I
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**Format for Compliance Certificate for meeting Technical Specifications -**

(To be submitted by bidders on official letter-head of the company)

No.....

Dated .....

To,  
The Director  
Jharkhand Renewable Energy Development Agency  
Plot No.-328/B, Road No. -4,  
Ashok Nagar,  
Ranchi. - 834002

**Subject: Compliance Certificate for meeting Technical Specifications – Solar Lantern**

Sir,

Having examined and understood fully the contents of the Bid document of NIB No. ...., we hereby confirm that the Solar Lantern/ products offered by us herein meet the technical specifications and scope of work in to without any deviation whatsoever from those specified in the bid documents towards fulfilling the eligibility criteria & qualifications.

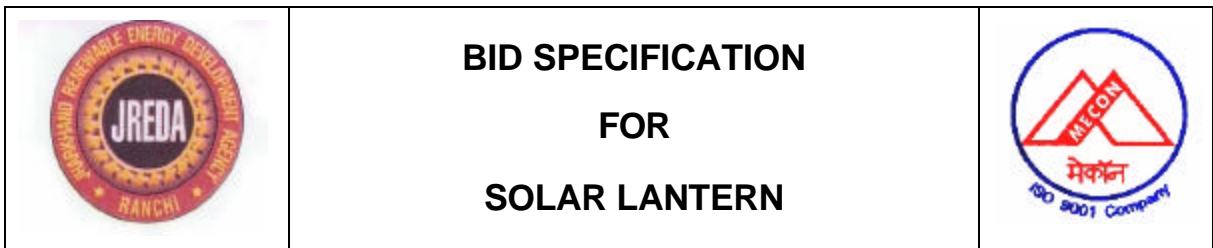
Yours faithfully,

(Authorized Signatory)

Name

Designation

Company Seal



<b>In Sealed Cover Part – II &amp; Part – III</b>	<b>Jharkhand Renewable Energy Development Agency NIB No <u>JREDA/SPV/1/SL/2006-07</u> <u>Bid Proforma : Solar Lantern</u> <u>Technical &amp; Commercial Part : Part – I / Price Part : Part - II</u></b>		
	<table border="1"> <tr> <td><b>Proforma</b></td> <td><b>IV</b></td> </tr> </table>	<b>Proforma</b>	<b>IV</b>
<b>Proforma</b>	<b>IV</b>		

**Format for authorizing for attending Bid Opening Meeting**  
(To be submitted by bidders on official letter-head of the company)

No.....

Dated .....

To,  
The Director  
Jharkhand Renewable Energy Development Agency  
Plot No.-328/B, Road No. –4,  
Ashok Nagar,  
Ranchi. - 834002

Subject: **Authorizing letter for attending Bid Opening Meeting of Notice Inviting Bid**  
**No..... for bid on Solar Lantern**

Sir,



We hereby authorize ..... (Name & Designation) to attend the Bid Opening Meeting to be held on ..... at JREDA on behalf of our company. He is also authorized to provide any clarification, if any, and signing of documents, etc. at the time of opening.

The specimen signature of authorized person is as follows:

(Specimen Signature)  
Name & Designation

Yours faithfully,

(Authorized Signatory)  
Name  
Designation  
Company Seal

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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**Proforma-V**

**Jharkhand Renewable Energy Development Agency  
NIB No JREDA/SPV/1/SL/2006-07**



In Sealed Cover  
Part - II

**Bid Proforma – Solar Lantern**

**Part – I : Technical & Commercial Part**



1. (a) Name of the manufacturer :
- (b) Postal Address :
- (c) Telephone No., Fax No., E-mail :
- d) GPS Co-ordinate of registered office, Factory campus and photographs of registered office & Factory.
2. Name and designation of the authorised signatory to whom reference shall be made :
3. Nature of firm (individual/Partnership/ Pvt. Ltd./Public Ltd. Co./ Public Sector) [Attach attested copy] and photographs of MD or Two Directors of the company. :
4. Registration No. :
5. Financial capability (Attach certificate of financial capability from Bank/Financial Institution) :
6. Specify the item originally manufactured
7. % Growth in Net Worth in last three years
8. Name of govt. agencies to whom the manufacturer supplied during last 3 years (with supporting document)
9. Performance Certificate from Govt. agency
10. Year of starting of manufacturing of PV component

Prepared by: V. Tigga	Checked by: Dr. P. K. Maji	Approved by: B. K. Verma
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	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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11. International standard awarded (Attach photocopy of certificate)
12. Installed capacity for solar product / component
13. Production and sales of solar component in last three years
14. Total sales of PV product during the last four years
15. Name of material and model type offered :
16. Name of the work :
17. Name of manufacturer of Solar Lantern :  
with full address :
  - (i) SPV SL
  - (ii) PV Module
  - (iii) Control Electronics / Charge Controller
  - (iv) Battery
18. Quantity offered : ..... Nos.
19. FOR destination Price :  
(Across Jharkhand)
20. Acceptance of terms of payment :
21. Acceptance of penalty clause :
22. Validity of the offer is valid up to : 31-03-07
23. Particulars of Earnest Money Deposit :  
[Amount, Bank Draft No. (Attach evidence)]
24. Particulars of payment for purchase of bill

Prepared by: V. Tigga	Checked by: Dr. P. K. Maji	Approved by: B. K. Verma
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	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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of quantity & specification  
(Attach evidence)

25. Indicate delivery period :
26. Acceptance of the technical specifications. :  
(If not accepted, attach relevant technical specification duly approved and certified by designated competent authority)
27. (i) Whether attested photocopy of BIS Certificate and/ or Test Certificate issued by MNES Approved Institution/ Centres attached. :  
(Certificate shall be as required by MNES)
- (ii) Whether proof of enlistment with MNES attached.
- (iii) Give Registration no. & other details on above, if any
28. Performance guarantee :  
(Give details and period of guarantee)
29. Warranty details must be mentioned for each type of material and sub-system :
  - (a) Solar Lantern & Control Electronic
  - (b) PV Module
  - (c) Battery
30. Whether manufacturer is permanently registered as an SSI UNIT of Jharkhand or NSIC UNIT for SPV system (attach Photostat of certified copy) :

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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31. Place where materials will be :  
manufactured and place where materials  
will be available for inspection.
  
32. Whether the bidder has submitted details :  
with regard to supplies made to important  
organisations.
  
33. Any deviations made from the technical : No deviation  
specifications and general terms &  
conditions of bid (Give details, if any)
  
34. Whether up-to-date income tax and sales :  
tax clearance certificate submitted (Give  
details)
  
35. Details of any existing service network in  
Jharkhand  
(Name & address of service centre, year  
of opening)
  
36. Other details and remarks, if any :



**Signature of Authorised Signatory**

**Name** \_\_\_\_\_

**Designation** \_\_\_\_\_

**Company Seal** \_\_\_\_\_

(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).

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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**Proforma-VI**

**JHARKHAND RENEWABLE ENERGY DEVELOPMENT AGENCY**

**In Sealed Cover  
Part - II**

**NIB No. JREDA/SPV/1/SL/2006-07**

**Bid Proforma – Solar Lantern**

**Part –I : Technical & Commercial Part**

**Information in Support of Meeting Eligibility Condition**



Details of orders received & executed by manufacturer/supplier for supply of Solar Lantern to different Govt. Organisation/JREDA/ Other Nodal Agency/Important Organisation & Institution during last three years.

Sl No.	Name of Agency/ Organisation	<u>P.O. No./date</u> Ordered Qty.	Name of Model	Delivery schedule	Qty. supplied within delivery schedule	Qty. supplied after delivery schedule	Date of full supply
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>

- Note : (1) Attach Photocopies of Purchase Orders  
(2) Attach Photocopies of certificate of satisfactory performance issued by concerned Agency/Organisation

**Signature of Authorised Signatory**  
Name \_\_\_\_\_  
**Designation** \_\_\_\_\_  
**Company Seal** \_\_\_\_\_

(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).

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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**Proforma-VII**

**JHARKHAND RENEWABLE ENERGY DEVELOPMENT AGENCY**

**In Sealed Cover  
Part - III**

**NIB No. JREDA/SPV/1/SL/2006-07  
Bid Proforma – Solar Lantern**

**Part – II : Price Part**

**Supply, of Solar Lantern**



Type of Solar Lantern	UNIT Prices inclusive of all taxes and duties, transportation, testing, etc.	Total Quantity offered	Total price offered inclusive of all taxes and duties, transportation, , testing etc. (Rupees)
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Model – II A			

**Note:**1 Price quoted for Solar Lantern 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. F.O.R. destination at any site in Jharkhand and inclusive of performance testing and training. **Percentage/amount of various factor considered in the unit price shall be mentioned here .**

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

**Signature of Authorised Signatory**  
Name \_\_\_\_\_  
Designation \_\_\_\_\_  
Company Seal \_\_\_\_\_

(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).

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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**Proforma-VIII**

**Jharkhand Renewable Energy Development Agency**

**NIB No. : JREDA/SPV/1/SL/2006-07**

**Bid Proforma – Solar Lantern**

**Technical & Commercial Part : Part – I**

**Format for Warranty Card to be supplied with each Solar Lantern**

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

**WARRANTY CARD**

**Solar Lantern**

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) Warranty valid upto :
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 rated :  
at 27<sup>0</sup>C :
  - g) Warranty valid upto :
6. Details of Electronics & other BOS item :
  - a) Name of the Manufacturer :
  - b) Make :
  - c) Model :
  - d) Serial No(s) :
  - e) Month & year of Manufacture :
  - f) Warranty valid upto :
7. Designation & Address of the person to be :  
contacted for claiming Warranty obligations :


Place & Date:

(Signature)

**Name & Designation**

Name & Address of the Manufacturer / Supplier, (SEAL)

Prepared by: V. Tigga	Checked by: Dr. P. K. Maji	Approved by: B. K. Verma
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	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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***Filling Instructions :***

- (1) The Solar Lantern components will be generally warranted as per clause 18 of General Terms & Conditions & covering the MNES specified warranty. The manufacturer can also provide additional information about the system and conditions of warranty as necessary. The warranty card to be supplied with the system must contain the details of the system supplied as per format given above.
- (2) During the warranty period JREDA/ users reserve the right to cross check the performance of the systems for their minimum performance levels specified in the MNES specifications.

	<b>BID SPECIFICATION FOR SOLAR LANTERN</b>	
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**Proforma-IX**

**Jharkhand Renewable Energy Development Agency**

**NIB No. : JREDA/SPV/1/SL/2006-07**

**Bid Proforma – Solar Lantern**

**Technical & Commercial Part : Part – I**

**Format for No Deviation Confirmation**

**NO DEVIATION CONFIRMATION  
( Bid Document No. \_\_\_\_\_ )**

To,  
The Director,  
Jharkhand Renewable Energy Development Agency  
Plot No.-328/B, Road No. –4,  
Ashok Nagar,  
Ranchi. - 834002

Dear Sir,

We understand that any deviation/ exception in any form may result in rejection of bid. We, therefore, certify that we have not taken any exceptions/ deviations anywhere in the bid and we agree that if any deviation is mentioned or noticed, our bid may be rejected.

Note: This NO DEVIATION CONFIRMATION should be written on the letterhead of the bidder indicating tender ref. no. duly signed and stamped with date by a person competent and having the power of attorney to bind the bidder.

**(SEAL AND SIGNATURE OF BIDDER)**