# Bid Specifications for Solar Water Pumping System (SWPS) Under Solar Photovoltaic Programme

For Financial Year 2012-13

Sponsored by
(JREDA)
Government of Jharkhand



Jharkhand Renewable Energy Development Agency (JREDA)

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# NIB No: 18/JREDA/SPV/SWPS/2013-14

Sub: Manufacturing, Supply, Installation and Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Solar Water Pumping Systems (SWPS) under Solar Photovoltaic Programme 2012-13 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 Solar Water Pumping Systems (SWPS) under Solar Photovoltaic Programme 2012-13 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. The total bid quantity has been divided into two groups, namely Lot I (containing 62 nos. Solar Pumps of 2 hp capacity) and Lot II (containing 15 nos. Solar Pumps of 5 hp capacity)

#### Part –I The Technical Eligibility 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 Proforma given at **Annexure-2**.

- 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 Motor-Pump Sets or PV System Electronics (Conforming 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 systems including SPV Cells/ Modules or Solar pumps or PV System Electronics as applicable. Authorized dealers and subcontractors are not eligible to participate.
- 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 31.03.2012/2013, whichever is applicable indicating clearly the sale and turnover of SPV systems. 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, installation & commissioning of at least 28.0 kWp SPV systems for Lot-I & 18.0 kWp SPV systems for Lot-II to any SNA / Govt. Organization / PSU in the last seven years ending up to date of advertisement of this tender...

For MSME of Jharkhand: Bidder should have cumulative experience of executing contracts of supply, installation & commissioning of at least 12.0 kWp SPV systems for Lot-I & 7.2 kWp SPV systems for Lot-II to any SNA / Govt. Organization / PSU in the last seven years ending up to date of advertisement of this tender.

The copy of order and corresponding certificate indicating its successful execution should be enclosed with the check list as at Annexure-2. In absence of both these documents, the claim for experience will not be accepted.

5. The offered PV Modules should be as per relevant IEC 61215/IS Standards having test certificates prescribed by MNRE. The valid test certificate should be enclosed.

 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.

#### 7. **Turnover Requirement:**

For General Bidder: Bidder should have the minimum average Annual Turnover of Rs. 53.00 Lakhs for Lot-II & Rs. 29.00 Lakhs for Lot-II derived from the last three financial years ending on 31.03.2012/2013 on the basis of audited annual accounts for minimum lot size.

For MSME of Jharkhand: Bidder should have the average Annual Turnover of Rs. 21.20 Lakhs for Lot-I & Rs. 11.62 Lakhs for Lot-II derived from the last three financial years ending on 31.03.2012/2013 on the basis of audited annual accounts for minimum lot size. The certificate should be as per the Proforma given at Annexure-12.

#### 8. **Net worth Requirement:**

For General Bidder: Bidder should have the minimum Net Worth of Rs. 21.20 Lakhs for Lot-I & Rs. 11.62 Lakhs for Lot-II as on 31.03.2012/2013on the basis of audited annual accounts

**For MSME of Jharkhand:** Bidder should have the minimum Net Worth of **Rs. 10.60 Lakhs for Lot-I & Rs. 5.81 Lakhs for Lot-II** for as on 31.03.2012/2013 on the basis of audited annual accounts for minimum lot size.

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

- 9. 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 favor 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) 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).
- 10. Bidders should submit in Part I (Technical Bid) the earnest money in the form of either through Demand Draft or 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. The bank guarantee shall remain valid for 12 months.
- 11. **Empanelment Procedure after opening of Financial Bid:** The Financial bid should be submitted in a separate envelope as per the Proforma given at **Annexure-5**. The lowest rate i.e. L1 received would be the appropriate rate. The bidders shall be ranked as L1, L2, L3 and so on based on financial bids.

JREDA will allot the quantum of work to L1 bidder on the basis of his financial competence. The financial competence of the bidder will be evaluated on the basis the average annual turnover of last three years and the Net Worth as on 31.03.2012 whichever is minimum. If required, the remaining work will be then offered to L2 bidder at L1 rate, and so on.

For MSME registered in Jharkhand to extend the provisions of section 18.1 (ii) (d) of Jharkhand Industrial Policy 2012 for work allocation under the tender. For this purpose a separate empanelment of MSME registered in Jharkhand will be prepared provided the condition of section 18.1 (ii) (d) are fulfilled and same procedure will be followed in the allocation of work in the preceding paragraph.

# **Particulars of Bid**

# NIB No: 18/JREDA/SPV/SWPS/2013-14

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

1.	Name of work	Manufacturing, Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Solar Water Pumping Systems (SWPS) under Solar Photovoltaic Programme 2012-13 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis.
2	Tentative Quantity	Solar PV Water Pumping System: <b>62x2HP and 15x5HP</b> 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.3.30 Crore</b> on basis of bench mark cost of MNRE.
3	Lot size	Lot-I: 62 nos. of 2 HP capacity (Eqv.111.6 kWp)  Lot-II: 15 nos. of 5 HP capacity (Eqv.72.0 kWp).
4	Cost of Bid document (Non-refundable)	<ul> <li>Rs.10, 000/- (Rupees Ten Thousands only) for General Bidder.</li> <li>Rs. Nil for MSME of Jharkhand.</li> </ul>
5	Earnest Money Deposit	For General Bidder: Rs. 4.25 lakh for Lot-I & 2.33 lakh for Lot-II.  For MSME of Jharkhand: Nil.
6	Time of completion	Four months from the date of issue of purchase order/intimation.
7	Validity of offer for acceptance	Six months from the last date of submission of Bid.
8	Date of commencement and time of Issue of bid documents	From <b>01.08.2013</b>
9	Last date & time of submission of bids document	<b>30.08.2013</b> up to 3.00 PM.
10	Date & time of opening Technical bid Part-I	<b>30.08.2013</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) Plot No. 328/B, Road No.4,Ashok Nagar Ranchi- 834002. Ph.No: 2246970,Fax No: 0651-2240665 Web site: www.jreda.com E-mail: info@jreda.com

#### 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 **33 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 or Demand Draft 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, installation & commissioning. 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 (i.e. 5% of work value) shall be treated as Performance guarantee after supply, installation & commissioning 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 demand draft or bank guarantee in favor 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 Proforma 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.

- 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) NIB No. 18/JREDA/SPV/SWPS/2013-14 (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 only the Proforma 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 SWPS" (iii) Name and address of the contact person of the bidding firm, and (iv) Should be addressed to Director, JREDA, Plot No. 328 B, Road No. -4, Ashok Nagar, 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 Proforma 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 SWPS 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 Electronics, Inverter, PV modules and other hardware) of SWPS for five years from the date

of installation. For PV modules, the replacement guarantee is for Twenty five (25) years. The date of CMC period shall begin on the date of actual commissioning of SWPS. It is mandatory for the contractor to carry out CMC regularly and submit report to JREDA quarterly. CMC documents should be certified by Mukhiya/Panchayat Sewak /BDO.

#### 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, tightening of all electrical connections, regular checks to identify any leakage of electricity, changing of tilt angle of module mounting structure, 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.

#### 12 Other Terms & Conditions

- **12.1** Insertion, post-script, addition and alteration shall not be recognized unless confirmed by bidder's signature and stamp.
- **12.2** Incomplete tender or tenders not submitted as per requirement as indicated in the NIT are likely to be rejected.
- **12.3** Bidders shall submit their offer strictly as per terms and conditions of the tender document without any deviation.
- 12.4 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
- 12.5 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.
- 12.6 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.
- 12.7 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.
- 12.8 No postal transaction shall be entertained for obtaining bid documents.
- 12.9 Issuance of bid documents shall not construe that the bidders would be automatically considered qualified.
- 12.10 For any clarification or query with regard to technical or other details mentioned in the tender by JREDA, the prospective bidders should send their request via official e-mail i.e. <a href="mailto:info@jreda.com">info@jreda.com</a> or through written request latest by 16.08.2013 only. No request after the date shall be entertained by JREDA.

#### **General Terms & Conditions**

#### NIB No: 18/JREDA/SPV/SWPS/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 Solar Water Pumping System includes Manufacturing, Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Solar Water Pumping Systems (SWPS) under Solar Photovoltaic Programme 2012-13 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.

The above scope of work doesn't include the work of boring, construction /supply of water tank or associated pipelines to the water tank.

#### 3.0 Bid document

Tender document shall comprise all the documents mentioned in the table of contents of the documents. 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 offer, 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 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 clearances 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 get payment on availability of fund in JREDA as given here under:

- (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.
  - iv. Photographs of all the equipment (materials) at destination with signature& seal of Consignee & JREDA Officials.
- (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 contractor.

#### 7.0 Dispatch Instructions

All items/equipments shall be subject to pre-dispatch inspection by JREDA or its authorized representatives before their dispatch. The contractor will submit test report with regard conformity to technical specifications for the items to be dispatched at site. 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.

#### 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

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 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 Solar PV Pumps will rest on the successful bidder. The training program will be organized in consultation with JREDA & the Consignee. The training program will focus on operation and maintenance of the solar pumps. Printed leaflet/literature should be made available in Hindi by the Supplier regarding the operation and maintenance of their solar pumps.
- 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.

19.0 Warranty: The whole system including submersible pumps shall be warranted for 5 years from the date of installation. During the warrantee period repairing/replacement of all defective components and sub-component of the system as per the requirement to ensure proper operation of the system is required by the bidder.

# **Technical Specification**

# NIB No: 18/JREDA/SPV/SWPS/2013-14

#### SOLAR PHOTOVOLTAIC WATER PUMPING SYSTEMS

#### I. DEFINITION

A solar photovoltaic water pumping system consists of a PV array, a DC/AC submersible motor pump set, electronics, if any, interconnect cables and an "On-Off" switch. PV Array is mounted on a suitable structure with a provision of tracking. Electronics could include Maximum Power Point Tracker (MPPT), Inverter in case of AC pump and Controls/Protections etc. Storage batteries will not constitute a part of the SPV Water Pumping System.

Components and parts used in the SPV water pumping system including the PV modules, pumps, metallic structures, cables, junction box, switch, etc. should conform to the BIS/ IEC/ international specifications, wherever such specifications are available and applicable.

#### II. PERFORMANCE SPECIFICATIONS AND REQUIREMENTS (DUTY CYCLE)

For Deep Well Pumps, the water discharge should be a minimum of 28 liters of water per watt peak of PV array capacity used per day from a total head of 30 meters. In case of High Head, Deep Well Pumps, the water discharge should be a minimum of 17 liters of water per watt peak of PV array capacity used per day from a total head of 50 meters.

Use of a tracking system to enhance the availability of solar radiation to lift desired quantity of water is desirable. It should be specified whether the minimum water output is achieved directly or through tracking of PV Array. The actual duration of pumping of water on a particular day and the quantity of water pumped could vary depending on the location, season, etc.

#### **PV ARRAY**

The SPV water pumping system should be operated with a PV array capacity in the range of 200 Watts peak to 5000 Watts peak, measured under Standard Test Conditions (STC).

Sufficient number of modules in series and parallel could be used to obtain the required PV array power output. The power output of individual PV modules used in the PV array, under STC, should be a minimum of 75 Wp, with adequate provision for measurement tolerances. Use of PV modules with higher power output is preferred. Indigenously produced PV module (s) containing mono/multi crystalline silicon solar cells with following features should be used in the PV array for the SPV Water Pumping systems:

- Modules supplied with the SPV water pumping systems should have certificate as per IEC 61215 specifications or equivalent National or International/ Standards.
- Modules must qualify to IEC 61730 Part I and II for safety qualification testing.
- The efficiency of the PV modules should be minimum 13% and fill factor should be more than 70%.

- The terminal box on the module should have a provision for "Opening" for replacing the cable, if required.
- Each 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) Im, Vm and FF for the module
  - (viii) Unique Serial No and Model No of the module

# 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.

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-2012-13
- Not for sale or transfer
- Statutory action would be taken by JREDA, if it found sold or transferred under different Sections of IPC.

#### III. MOTOR PUMP-SET

Following types of motor pump sets could be used in the SPV water pumping systems:

- I. Submersible DC motor pump set
- II. Submersible AC motor pump set

The "Motor Pump Set" should have the following features:

- The mono block DC/ AC motor pump set has its driving unit and impeller mounted on a common shaft, thereby giving it a perfect alignment. The pump should be provided with specially developed mechanical seals which ensure zero leakage.
- The motor should be D.C. Motor in case of 2 HP Pump Sets and above 2 HP capacity, the motor should operate on AC. The suction and delivery head will depend on the site specific condition of the field.
- Submersible pumps shall be used according to the technical need of the particular case.
- The suction/ delivery pipe (GI/HDPE), electric cables, floating assembly, civil work and other fittings required to install the system.
- The following details should be marked indelibly on the motor pump set
  - (a) Name of the Manufacturer or Distinctive Logo.
  - (b) Model Number.
  - (c) Serial Number.

#### IV. MOUNTING STRUCTURES and TRACKING SYSTEM

To enhance the Performance of SPV water pumping systems, it is desirable to use a tracking system. Manual, passive and auto tracking are permitted. The PV modules will be mounted on metallic structures of adequate strength and appropriate design, which can withstand load of modules and high wind velocities up to 150 km per hour. The support structure used in the pumping system will be hot dip galvanized iron (G.I).

Facilities to be provided in the structure:

- Seasonal tilt angle adjustment and
- Three times manual tracking in a day

The G.I. structures for mounting the Solar panels could be so designed, that these can be manually/ auto adjusted for optimal tilt throughout the year. A simple provision is to be provided so that the panel can be manually adjusted three times a day (East-South-West) to face the sun optimally. This adjustment could be done in the early morning, noon time and afternoon to increase the total input solar radiation on the solar panel surface substantially. This provision helps the motor pump set to start early in the morning and function efficiently till late in the afternoon, thereby increasing the total output of the pumping system.

The "Mounting Structure" should have the following features:

- The modules support structure shall be mild steel, hot dipped galvanized (120 micron) iron for holding the PV modules. The size of angle iron should not be less than 50x50x5 mm.
- Each panel frame structure shall be so fabricated as to be grouted on ground or roof on its legs. It will withstand severe cyclone/ storm with the speed of 150 Km/Hr.
- Each panel frame structure shall have provision to adjust its angle of inclination to the
  horizontal between 10 to 40 degrees with a step of 10 degree, so that the inclination
  can be adjusted at the specified tilt angle whenever required.
- Each panel frame shall be complete with a weatherproof junction box as per the relevant BIS specifications, where the module terminals shall be interconnected and output taken.
- All nuts and bolts should be made of very good quality and should be corrosion resistant.
- The structure should be designed to allow easy replacement of any module.
- The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels.

#### V. ELECTRONICS AND PROTECTIONS

- Use of Maximum Power Point Tracker (MPPT) is encouraged to optimally use the Solar panel and maximize the water discharge.
- Inverter could be used, if required, to operate an A.C. Pump.
- Adequate protections should be incorporated against dry operation of motor pump set, lightning, hails and storms. Full protection against open circuit, accidental short circuit and reverse polarity should be provided.

#### VI. ON/OFF SWITCH

A good reliable switch suitable for DC / AC use is to be provided with the motor pump set. Sufficient length of cable should be provided for inter-connection between the PV array and the motor pump set.

#### VII. O/M MANUAL

An Operation and Maintenance Manual, in English and the local language, should be provided with the solar PV pumping system.

The following minimum details must be provided in the Manual:

- (a) About photovoltaics
- (b) About solar pump
- (c) About PV module
- (d) About motor pump set
- (e) About tracking system
- (f) Clear instructions about mounting of PV module.
- (g) About electronics used in AC motor pump sets, if any
- (h) DO's and DONT's,
- (i) Clear instructions on regular maintenance and Trouble Shooting of the pumping system.
- (j) Name & address of the person or Centre to be contacted in case of failure or complaint.

#### VIII. INDICATIVE TECHNICAL SPECIFICATIONS

#### **General Information:**

The information given here under is indicative only and the designer must satisfy himself regarding quality wise supply of Solar Modules / panel, Solar Photovoltaic (SPV) Pump, and GI support structure as well as all aspects of commissioning of solar infrastructural facility.

The scope of work includes supply, installation & commissioning of Solar PV Water Pumps on bore-well of minimum 4"/6" diameter (to be provided by the user) at various sites as per the technical specification mentioned below. The whole system including submersible pumps shall be warranted for 5 years, The PV Modules must be warranted for output wattage, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

TECHNICAL SPECIFICATIONS OF SOLAR DEEPWELL PUMPING SYSTEM

Description	Model II	Model IV
Solar PV array	1800 Wp	4800 Wp
Motor pump set type	Submersible with electronic controller	Submersible with electronic controller
Max. total dynamic head	50 meters	80 Metres
Module mounting structure	MS hot dipped galvanised, three times manual tracking facilities	MS hot dipped galvanised, three times manual tracking facilities
Required shadow free area	75 sq. Metres	200 sq. Metres
Water Output *	51,000 liters per day from a total head of 30 meters	82,000 liters per day from a total head of 50 meters

<sup>\*</sup> Water output figures are on a clear sunny day with three times tracking of SPV panel when solar radiation on horizontal surface is: 5.5 KWH/ sq. m/day

# Details of Solar Pump Models and configuration to be provided\*

S. No.	SPV Array Wp (900/ 1200/ 1800/ 2700/ 3000/ 4800)	Proposed No of SPV modules with Wp& Make	Motor- Pump set Model & Make	Type of submersible Motor- Pump set DC/ AC	Motor- Pump set HP	Total Dynamic Head (M)	Water Output** (Ltrs./ day)

- \* Head v/s discharge characteristic curves along with details of Motor-pump set should be provided with this document.
- \*\*. Water output figures are on a clear sunny day with three times tracking of SPV panel when solar radiation on horizontal surface is: 5.5 KWH/sq.m/day.

#### Format for Covering Letter

#### NIB No: 18/JREDA/SPV/SWPS/2013-14

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

To,

The Director,

Jharkhand Renewable Energy Development Agency

Plot No. 328/B, Road No. 4, Ashok Nagar,

Ranchi- 834002.

Sub:

Manufacturing, Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Solar Water Pumping Systems (SWPS) under Solar Photovoltaic Programme 2012-13 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. 18/JREDA/SPV/SWPS/2013-14. 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: <u>18/JREDA/SPV/SWPS/2013-14</u>

S. No.	Particulars	Yes / No	Flag No.*
	Confirm whether you have prepared all the documents in a spiral binding		
1	booklet. If not, then bid will be rejected.		
2	All pages have been serially numbered. If not, then bid will be rejected.		
3	All pages have been signed. If not, then bid will be rejected.		
4	Covering Letter as per Annexure-1.		I
5	Information about the Bidder as per <b>Annexure-6</b> .		II
6	The bidder is MNRE Channel Partner or registered PV System Integrator or Manufacturing company of SPV cells or PV Modules or Solar pumps or PV System Electronics confirming to relevant National/International		Ш
0	Standards (Attach relevant certificates of Industry Department or MNRE).		111
7	To indicate the functionality of the firm attach the balance sheet of last three years ending 31.03.2012/2013 of the firm duly certified by statuary Auditor.		IV/V/VI
8	Registration certificate of MSME of Jharkhand State (Enclose certificate issued by Industry Department, Govt. of Jharkhand).		VII
9	The proof of supply in any SNA/Govt. organization/PSU in the last seven years as per <b>Annexure-4</b> . Attach copy of the order and corresponding certificate indicating its successful execution otherwise claim will not be accepted.		VIII/IX Series
10	IEC certificates for Solar PV Module (Attach relevant certificate).		X
11	A copy of valid VAT/ TIN registration certificate		XI
12	Average Annual Turnover for last three years ending 31.03.2012/2013.  (Attach average annual turnover certificate as per <b>Annexure-12</b> )		XII
13	Net worth as on 31.03.2012/2013. (Attach proof & Net worth certificate as per <b>Annexure-13</b> )		XIII
14	Details of tender document fee (Bank Draft No. and Date)		XIV
15	Details of Earnest money (Bank Guarantee No. and Date) As per <b>Annexure-9.</b>		XV
16	Declaration by Bidder as per <b>Annexure-7</b> .		XVI
17	Product Leaflet/Catalogue (if any).		XVII
18	Technical Detail of SWPS of Bidder as per <b>Annexure-3</b> .		XVIII
19	Authority Letter for Signing Bid Document & Attending Bid Opening Meeting as per Annexure-11.		XIX

<sup>\*</sup> 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: 18/JREDA/SPV/SWPS/2013-14

To,

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

Dear Sir,

Sub: Manufacturing, Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Solar Water Pumping Systems (SWPS) under Solar Photovoltaic Programme 2012-13 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis.

SL. No.	Particulars		Details
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 Motor-Pump Sets and Origin	•	
10	Type of Motor-Pump Sets		
11	Motor Rating (HP)	:	
12	Total Dynamic Head (M)		
13	Water Output (Ltrs/day)		

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

#### **Details of Orders Received and Executed in Last 7 Years**

# NIB No: 18/JREDA/SPV/SWPS/2013-14

Details of Orders Received & Executed by the Manufacturer/Supplier for Supply of Solar PV Water Pumping System to SNA/ Govt. Organization during Last Seven Years.

SL. No.	Name of Agency/ Organization	Details of Purchase Order	Name of Model	Delivery Schedule	Qty. Supplied Within Delivery Schedule	Qty. Supplied After Delivery Schedule	Date of Full Supply

Yours faithfully,

(Signature of Authorized	Signatory
--------------------------	-----------

Name:

Designation:

Company Seal:

#### Note:

- (a) Attach Photocopies of Purchase Orders
- (b) Attach Photocopies of Corresponding 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: 18/JREDA/SPV/SWPS/2013-14

S. No.	Description Price in Rupes		1 Rupees
		Unit Price (Rs.)	Total Price (Rs.)
1	2	4	5=3X4
1	Supply, Installation, Testing and Commissioning of <b>2 HP</b> Solar PV Water Pumping System (SWPS) as per the Bid Document. Total Quantity 62 Nos.		
2	Supply, Installation, Testing and Commissioning of <b>5 HP</b> Solar PV Water Pumping System (SWPS) as per the Bid Document. Total Quantity 15 Nos.		

- 1 The ranking of bidders for supply of **2 HP & 5HP SWPS** will be done separately.
- Above quoted price for SWPS 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.
- 3 Certified that rates quoted for SWAPS are as per specifications, terms & conditions mentioned in the bid document.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

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

# Information About The Bidding Firm NIB No: 18/JREDA/SPV/SWPS/2013-14

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

SL. No.	Particul	ars
1.	Name of the Bidder	
2.	Address of Bidder with Telephone, Fax, email	
3.	Address of the Registered Office with GPS co- ordinates	
4.	Address of the works with GPS co-ordinates	
5.	Name & Designation of Authorized Signatory for Correspondence (Attach Power of Attorney as per Annexure-11)	
6.	Nature of Firm (Proprietorship/Partnership /Pvt. Ltd./Public Ltd. Co./Public Sector)	
7.	Permanent Account Number (PAN)/TIN (Attach proof)	
8.	Firm's Registration Number (Attach proof)	
9.	Sales Tax/Value Added Tax Registration Number (Attach proof)	
10.	Specify the Item Originally Manufactured (SPV module/Electronics/Pump)	
10.	(Attach copy of Registration Certificate of Industry Department)	
11.	Details of in-house testing facility (Attach Proof)	
12.	Office/ Dealer and Service network in Jharkhand with TIN No.(Give details)	
13.	Quoted quantity	
14.	Place where Materials will be Manufactured	
15.	Place where Materials will be Available for Inspection	
16.	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: 18/JREDA/SPV/SWPS/2013-14

	(To be submitted in the official letter head of th	e company)
havin	er) being desirous of tendering for the rate contract for work und ag fully understood the nature of the work and having carefully fications etc. as mentioned in the tender document, DO HEREBY D	noted all the terms and conditions,
1.	The Bidder is fully aware of all the requirements of the ten provisions of the tender document.	nder document and agrees with all
2.	The Bidder is capable of executing and completing the work as re	equired in the tender.
3.	The Bidder accepts all risks and responsibilities directly or indire of the tender.	ctly connected with the Performance
4.	The Bidder has no collusion with any employee of JREDA or very preparation of the bid.	with any other person or firm in the
5.	The Bidder has not been influenced by any statement or promises but only by the tender document.	s of JREDA or any of its employees,
6.	The Bidder is financially solvent and sound to execute the work.	
7.	The Bidder is sufficiently experienced and competent to perfor JREDA.	m the contract to the satisfaction of
8.	The information and the statements submitted with the tender are	true.
9.	The Bidder is familiar with all general and special laws, acts, ord Municipal, District, State and Central Government that may a personnel employed therein.	
10.	The Bidder has not been debarred from similar type of work by an	ny SNA/ Government Dept. /PSU.
11.	This offer shall remain valid for Six months from the date of open	ning of the tender.
12.	The Bidder gives the assurance to execute the tendered work conditions.	rk as per specifications terms and
13.	The Bidder confirms the capability to supply and install requir time.	red no. of systems within stipulated
14.	The Bidder accepts that the earnest money be absolutely forfeit undertake the work or sign the contract within the stipulated period	
		(Signature of Authorized Signatory)
		Name:
	I	Designation:

JREDA Page 26

Company Seal:

#### <u>Technical Detail Form</u> NIB No: 18/JREDA/SPV/SWPS/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 Motor-Pump Sets	
	(a) Name of the Manufacturer	
	(b) Make	
	(c) Model	
	(d) Batch/Serial No(s).	
	(e) Month & Year of Manufacture	
	(f) Rating (HP)	
	(g) Guarantee Valid Up To	
	(h) Total Dynamic Head (M)	
	(i) Water Output (Ltrs/day)	
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 & Company Seal)

#### **Filling Instructions:**

- 1. The SWPS components will be 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: 18/JREDA/SPV/SWPS/2013-14

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

То	o,	
Th	ne Director	
Jh	arkhand Renewable Energy Development Agency (JREDA)	
Plo	ot No. 328/B, Road No. 4, Ashok Nagar,	
Ra	anchi – 834002.	
W	THEREAS (Supplier's name) (thereinaft	teı
	ferred to as "Supplier"), a company registered under the Companies Act, 1956 and having its registered office	
	is required to deposit with you, the Purchaser, by way	
	Arrnest Money Rs. (Rupe	
	only) in connection with its tender for the work wi	
	ference to Notice Inviting Bid (NIB) No. dated	as
pe	er specification and terms and conditions enclosed therein.	
	THERAS you have agreed to accept a Bank Guarantee from us in	est
1.	We(Bank) hereby agree as	nd
	undertake to pay you on demand the said amount of Rs	
	Supplier/Tenderer after submission of his tender, resiles from or withdraws his offer or modifies the terr	
	and conditions thereof in a manner not acceptable to you or expresses his unwillingness to accept the ord	
	placed and/or letter of intent issued on the Supplier/Tenderer for the work under "Notice Inviting Bid Ro	
	No.: <u>18</u> /JREDA/SPV/SWPS/2013-14".	
?	Your decision as to whether the Supplier/Tenderer has resiled from or has withdrawn his offer or h	20
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 by	
2.	modified the terms and conditions thereof in a manner not acceptable to you or has expressed h	nis
2.		nis For

3.	Notwithstanding anything contained in the foregoing, our liability under this Guarantee shall be restricted to Rs				
4.	This Guarantee shall remain valid and in full force and effect up to				
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.	3. 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				
	Name of Bank Manager:				
	Address				

# <u>Certificate of Delivery of Solar PV Water Pumping Systems received by the Consignee as Proof of</u> <u>Compliance by the Supplier</u>

# NIB No: 18/JREDA/SPV/SWPS/2013-14 i æk.ki ⊭

Consignee/प्राप्त कर्ता का नाम :पदनामःपदनामः
वेभाग का नामः
वेभाग का पता :
प्रमाणित किया जाता है कि सोलर फोटोवोलटेइक कार्यक्रम के अंतर्गत जेडा द्धारा अनुदानित दर पर कुल सोलर Water Pumping System प्राप्त किया।
इन सोलर उपस्करों की आपूर्ति मेसर्स द्वारा की गइ <sup>'</sup> है।
Consignee/प्राप्त कर्ता का हस्ताक्षर & Seal:
देनांक :
ज्रेडा प्रतिनिधि का प्रमाण–पत्र
यह प्रमाणित किया जाता है कि उपर इंगित सामानों का निरीक्षण Specification के अनुसार प्राप्त करके उपर इंगित प्राप्त कर्त्ता को सुपूर्व की जा चुकी है।

# Format of Power of Attorney for Signing Bid

# NIB No: 18/JREDA/SPV/SWPS/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
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 Manufacturing, Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Solar PV Water Pumping Systems (SWPS) under Solar Photovoltaic Programme 2012-13 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis 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.

# <u>Format For Financial Requirement – Annual Turnover</u>

# NIB No: 18/JREDA/SPV/SWPS/2013-14

[On the letterhead of Bidding Company]

To,							
The Director, Jharkhand Renewable Energy Development A 328/B, Road No4, Ashok Nagar,	Agency,						
Ranchi- 834002.							
Dear Sir,							
Sub: Manufacturing, Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of Solar PV Water Pumping Systems (SWPS) under Solar Photovoltaic Programme 2012-13 for Jharkhand Renewable Energy Development Agency (JREDA) on Turnkey basis.							
We certify that the Bidding Company has an average Annual Turnover of Rs based or audited annual accounts of the last three years ending 31.03.2012/2013.							
Authorised Signatory	Statutory Auditor						
(Power of Attorney holder)	(Stamp & Signature)						
Date:							

# Format For Financial Requirement - Net Worth Certificate

# NIB No: 18/JREDA/SPV/SWPS/2013-14

[On the letterhead of Bidding Company]

To,		
The Director, Jharkhand Renewable Energy Development Agency, 328/B, Road No4, Ashok Nagar, Ranchi- 834002.	,	
Dear Sir,		
Sub: Manufacturing, Supply, Installation, Testing & Contract (CMC) of Solar PV Water Pumping Syste Jharkhand Renewable Energy Development Agency (J	ms (SWPS) under Solar Photovolt	
This is to certify that Net worth of The details a The details a	{insert the name of I are appended below.	Bidding Company}, as on
Particulars		Amount (In Rs.)
Equity Share Capital		,
Add: Reserves		
Subtract: Revaluation Reserve		
Subtract: Intangible Assets		
Subtract: Miscellaneous Expenditure to the extent no losses	ot written off and carried forward	
Net Worth as on 31st March 2012/2013		
Authorised Signatory	Statutory Auditor	
(Power of Attorney holder)	(Stamp & Signature)	