

NOTICE INVITING TENDER

For

**Design, Manufacture, Testing, Supply, Installation & Commissioning of 1.0 kWp&2.0 kWp Capacity
SPV Power Plants in Panchayat & Block offices of all districts of Jharkhand on Turnkey basis
including 5 years CMC on the complete system**

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

Under

Solar Photovoltaic Programme

For the Financial Year 2012-13



Jharkhand Renewable Energy Development Agency (JREDA)

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

Ph.: 0651-2246970, 2247049, 2240692

Fax: 0651-2240665

e-mail : info@jreda.com

Website: www.jreda.com

Contents

Sl. No.	Description	Page No.
1	Invitation for Tender	02
2	Particulars of Tender	07
3	Instruction to Bidder	08
4	General Terms and Conditions	12
5	Technical Specifications of SPV Power Plant of 1.0 kWp & 2.0 kWp	17
6	Format for Covering Letter	21
7	Check List of Eligibility bid	22
8	Format for Undertaking to confirm having capability & resources	23
9	Check List of Technical bid	24
10	Price Bid	25
11	Information about the Bidding Firm	26
12	Declaration by the Bidder	28
13	Technical Detail Form	29
14	Format for Certificate of Delivery of all the Equipments of Solar Power Plant received by the Consignee as Proof of Compliance by the Supplier	30
15	Installation Certificate	31
16	Format of Power of Attorney for Signing Bid	32
17	Format For Financial Requirement – Annual Turnover	33
18	Format For Financial Requirement -Net Worth Certificate	34
19	Format of Joint Deed Agreement among the members of Bidding Consortium/Association	35

Invitation of Tender for

Design, Manufacture, Testing, Supply, Installation & Commissioning of 1.0 kWp & 2.0 kWp Capacity SPV Power Plants in Panchayat & Block Offices in all districts of Jharkhand on Turnkey basis Including 5 years CMC on the complete system.

Preamble

As part of Solar Photovoltaic Programme, JREDA invites “Tender for Design, Manufacture, Testing, Supply, Installation & Commissioning of 1.0 kWp & 2.0 kWp Capacity SPV Power Plants in Panchayat & Block Offices in all districts of Jharkhand” for short listing of experienced & eligible SPV Power Plant System Integrators and leading Indian Manufacturers to whom work shall be allocated for successful execution of the project in a defined time frame. There are 24 districts in Jharkhand out of which 17 districts are affected by left wing extremism (LWE). **No bidders shall submit bid less than 500 kWp of SPV Power Plants.**

Part –I Minimum Eligibility Conditions:

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

1. The bidder should be MNRE approved Channel Partner/ MNRE approved manufacturer/ MNRE approved PV System integrator/A registered manufacturing company/Firm/Corporation in India (Including MSME of Jharkhand) of at least one of the major sub systems namely SPV Cells/ Modules or Battery or PV System Electronics (Confirming to relevant National/ International Standards. The bidder shall furnish either relevant MNRE certificate or concerned Industry Department certificate clearly indicating that they are manufacturers of SPV Power Plant including SPV Cells/ Modules or Battery or PV System Electronics as applicable. **Authorized dealers and subcontractors are not eligible to participate.**
2. The bidder should be a functional organization. To substantiate this claim, the bidder should submit the copy of balance sheet for last 3 years or from the date of establishment to 31.03.2012, whichever is applicable 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 SPV System/ SPV Power Plant (Supplied, Installation & Commissioned) of at least **125.0 kWp** capacities to any SNA / Govt. Organization / PSU in the last seven years ending up to date of advertisement of this tender for minimum lot size of 500 kWp. The bidder submitting the bid for higher capacity will require to have cumulative work experience equal to 25% of the bid capacity (i.e. same proportion of 500 kWp versus 125 kWp.).

For MSME of Jharkhand: Bidder should have cumulative experience of executing contracts of SPV System/ SPV Power Plant (Supplied, Installation & Commissioned) of at least **50.0 kWp** capacities to any SNA / Govt. Organization / PSU in the last seven years ending up to date of advertisement of this

tender for minimum lot size of 500 kWp. The bidder submitting the bid for higher capacity will require to have cumulative work experience equal to 10% of the bid capacity (i.e. same proportion of 500 kWp versus 125 kWp.).

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

5. The offered PV Modules should be Crystalline Silicon PV Modules as per IEC 61215 Standards or IS14286 and having test certificates prescribed by MNRE. In addition, the modules must conform to IEC 61730 part I – requirement for construction and part – II requirement for testing, for safety qualification or equivalent IS. The valid test certificate should be enclosed along with the check list as at **Annexure-2**.
6. Power Conditioning Unit (PCU) should conform to IEC 61683/ IS 61683 Standard for efficiency measurement and should also conform to IEC 60068-2(1, 2, 14, 30) or equivalent BIS standard for environmental testing. The inverter should be from Indian Manufacturer. The valid test certificate should be enclosed along with the check list as at **Annexure-2**.
7. Batteries should conform to relevant IEC / IS specifications and should fulfil the requirement as per specification given at Technical Specification for Capacity Test Charge/Discharge efficiency Self-Discharge as per MNRE requirements and valid test reports to be submitted along with the check list as at **Annexure-2**. The certificate should be in a form of an undertaking letter from the manufacturer complying all the technical specifications of battery.
8. The Bidder should have valid CST/State VAT/ TIN registration certificate. A copy of which should be enclosed in the check list as at **Annexure-2**.
9. The bidder should confirm that they have the resources and capability to supply and install not less than **8%** of the offered quantity per month in the form of an undertaking. The Performa for undertaking is given at **Annexure-3**.
10. **Turnover Requirement:**
For General Bidder: Bidder should have the minimum average Annual Turnover of **Rs. 3.0 Crores** derived from the last three financial years ending on 31.03.2012 on the basis of audited annual accounts for SPV Systems for minimum lot size of 500 kWp.
For MSME of Jharkhand: Bidder should have the average Annual Turnover of **Rs. 1.20 Crores** derived from the last three financial years ending on 31.03.2012 on the basis of audited annual accounts for SPV Systems for minimum lot size of 500 kWp.
Association/ Consortium are also eligible. The bidder submitting the bid for higher capacity will require to have average Annual Turnover in same higher proportion. The certificate should be as per the Performa given at **Annexure-12**.
11. **Net worth Requirement:**
For General Bidder: Bidder should have the minimum Net Worth of **Rs.1.20 Crore** as on 31.03.2012 on the basis of audited annual accounts for SPV Systems for minimum lot size of 500 kWp.
For MSME of Jharkhand: Bidder should have the minimum Net Worth of **Rs. 0.60 Crore** for minimum lot size of 500 kWp as on 31.03.2012 on the basis of audited annual accounts for SPV Systems for minimum lot size of 500 kWp.

The bidder submitting the bid for higher capacity will require to have Net Worth in same higher proportion. Net worth certificate should be as per the Performa given at **Annexure-13**.

12. For an Association/ Consortium, the turnover of the lead member of the Consortium/Association shall be taken for consideration. The technical credential of either are allowed in course of technical evaluation. The Consortium or Association shall submit a Joint Deed Agreement as per **Annexure-14**.
13. The bidder should either purchase the bid document from JREDA office by submitting a demand draft of Rs. 10,000/- (Rupees Ten thousand only) in favour of “Director, JREDA” on any Indian Nationalized Bank/Scheduled Bank, payable at “Ranchi”. Bidders may also download the bid document from JREDA website (www.jreda.com) and submit the cost of the bid document of requisite value in the form of Demand Draft, as applicable along with Part – I (Eligibility Bid).
14. Bidders should submit in Part – I (Eligibility Bid) the earnest money in the form of Bank Guarantee of requisite value as mentioned in “Particulars of Tender”. The Bank Guarantee shall be made in favour of “Director, JREDA” payable at Ranchi from any Indian Nationalized bank/Scheduled bank. The bank guarantee shall remain valid for 12 months.

Only those Bidders, who shall meet the above Criteria, shall be considered for further technical evaluation and assessment.

Part-II: Technical Evaluation:

(i) The Technical evaluation of only those bidders will be carried out, who will be found to be fulfilling all the minimum eligibility conditions. JREDA will evaluate the proposals received from the bidders for detailed scrutiny. During evaluation of proposals, JREDA may at its discretion, ask the bidders for clarification of their proposals. The bidder should submit the check list for this purpose as per the Performa given at **Annexure-4**.

The process for evaluation of proposals is as given below:

Sl. No.	Criteria *	Points
1	The bidder has ISO 9001 Certification	10
2	The bidder is MNRE accredited Off-Grid Channel Partner or a PSU or MSME registered with GoJ.	10
3	The average Annual Turnover of the Bidder in last 03 years ending 31.03.2012 on the basis of audited annual accounts. Max. 15 marks <ul style="list-style-type: none"> • Up to Rs. 3.0Crores • More than Rs. 3.0 Crores to 10.0Crores • More than Rs. 10.0 Crores 	05 10 15
4	Cumulative experience of the bidder in Supply, Installation & Commissioning of SPV Systems of 125kWp or more capacity in last seven years. Max. 20 marks <ul style="list-style-type: none"> • Up to 125 kWp. • 126kWp to 250 kWp. • 251 kWp to 500 kWp. • Above 500 kWp. 	05 10 15 20
5	Technical Manpower Qualification (The bidders should specify the exact number of technical manpower), for one Engr. 2 marks, for diploma Engrs. 1 mark and for ITI 0.25 mark will be applicable). The bidders should enclose the attested copies of salary sheet supported by Form 16 (as provided under IT Act) and qualification proof of each technical personnel. These personnel must be working continuously in the bidder firm during last one year. (The employees who are found to be working less than 12 months will not be entitled for any point). Max. 20 marks	20
6	No. of years of Experience in installation of Solar Power Systems including solar lanterns, solar home lights and solar street lights. Max. 15 marks <ul style="list-style-type: none"> • Up to 3 years • More than 3 years to 5 years • More than 5 years 	05 10 15
7	Timely completion of SPV Systems as mentioned in column 4. The bidder will be entitled for full marks when he submits the valid documents evidence for completion of minimum 500kWp of SPV Systems. Max. 10 marks	10

* All points must be supported by valid documentary evidences.

(ii) **Evaluation Method of Technical Competency:** Eligibility documents of all the bidders will be examined first. Technical bids of only those bidders, who have found to be fulfilling the minimum eligibility conditions, will be evaluated. Based on the above-mentioned criteria (as shown in table) Technical Score for each bidder shall be calculated and uploaded on JREDA Website. If any bidder has any grievance he can represent within three days and JREDA will respond to their grievances before opening of financial bids. The bids having a Technical Score of **60 marks** or more shall be qualified for the next stage: i.e. opening of the Financial Bid. The bidder obtaining a Technical Score less than 60 marks shall be disqualified and their respective Financial Proposal will not be opened. For MSME of Jharkhand the required minimum technical score shall be **50 marks**.

(iii) Empanelment procedure after opening of Financial Bid: The financial bid should be submitted in a separate envelope as per the Performa given at **Annexure-5**. 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 of Rs. 3.0 crore per 500 kWp for general bidder (Rs. 1.2 crore per 500 kWp for MSME of Jharkhand) from the average annual turnover of last three years and Rs.1.2 crore per 500 kWp for general bidder (Rs. 0.6 crore per 500 kWp for MSME of Jharkhand) from 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.

Since, this work is not procurement of materials only and requires execution of civil, electrical and other related works including five years Comprehensive Maintenance Contract (CMC), the section 18 of Jharkhand Industrial Policy 2012 is not applicable ipso facto. However, JREDA has decided as a special encouragement 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 Tender

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

1.	Name of work	Design, Manufacturing, Testing, Supply, Installation and Commissioning of 1.0 kWp & 2.0 kWp Capacity SPV Power Plants in Panchayat & Block Offices in all districts of Jharkhand on Turnkey basis including 5 years CMC on the complete systems.
2	Tentative Quantity	<ul style="list-style-type: none"> • Solar Photovoltaic Power Plant of 1.0 kWp – 4423 Nos. • Solar Photovoltaic Power Plant of 2.0 kWp – 260 Nos. • The estimated cost is about Rs.118 crore as per the bench mark rate of MNRE.
3	Minimum lot size	<ul style="list-style-type: none"> • 500 kWp SPV Power Plant. • No bidder shall submit bid less than 500 kWp of SPV Power Plants.
4	Cost of Bid document (Non-refundable)	<ul style="list-style-type: none"> ❖ Rs.10, 000/- (Rupees Ten Thousands only) for General Bidder. ❖ Rs. Nil for MSME of Jharkhand.
5	Earnest Money Deposit	<ul style="list-style-type: none"> ❖ For General Bidder: Rs. 25 lakh for the lot size of 500 kWp. The bidders for higher capacities were required to submit EMD in the same proportion. ❖ For MSME of Jharkhand: Nil
6	Time of completion	Twelve 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	Pre-bid meeting	13.03.2013 at 11.00AM.
9	Date of commencement and time of Issue of bid documents	From 08.03.2013.
10	Last date & time of submission of bids document	30.03.2013 up to 3.00 PM.
11	Date & time of opening Eligibility bid Part-I	30.03.2013 at 3.30 PM.
12	Date & time of opening Technical bid Part-II	Shall be intimated in due course on website & letter.
13	Date & time of opening Financial bid Part-II	Shall be intimated in due course on website & letter.
14	Place of issue and submission of bid documents and address for communication	<p>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</p>

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

3.2 The bank guarantee shall remain valid for 12 months.

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

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

3.5 The earnest money shall be forfeited if –

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

b. The successful bidder fails to furnish his Acceptance of the order within fifteen days of placement of LOI/LOA by JREDA.

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

4. Security Deposit

4.1 Successful General bidders shall submit a security deposit @10% of the allotted work order value in the form of Bank Guarantee on or before 20 days from issuing work order.

4.2 Successful MSME bidders are exempted from submission of security deposit.

4.3 The 50% Security Deposit shall be refunded / released after expiry of 60 days from the actual date of installation & commissioning to the bidder. The balance 50% Security Deposit will have to be maintained by the bidder with JREDA as Performance Guarantee till the completion of CMC period of 5 years.

5. Performance Guarantee

- 5.1 Security deposit of successful General bidders shall be treated as performance guarantee after supply of material.
- 5.2 Successful MSME bidders shall submit a Performance Guarantee @2.5% of the allotted work order value in the form of bank guarantee before release of 90% payment.
- 5.3 The Performance Guarantee will have to be maintained by the bidder with JREDA till the completion of CMC period of 5 years.
- 5.4 The Security Deposit/Performance Guarantee shall be submitted in the form of bank guarantee in favour of “Director, JREDA” payable at Ranchi from any Indian Nationalized bank/Scheduled bank.
- 5.5 Non submission of Security Deposit/Performance Guarantee within the time frame, shall lead to forfeiture of EMD and cancellation of LOI/LOA.
- 5.6 If Bidder/MSME unit fails to carry out the CMC of the work allotted to him as per the provisions of the tender documents for continuous period of one month 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 three envelopes, The Part-I (Eligibility bid), Part-II (Technical bid) and the Part – III (Price Bid) should be sealed in separate envelopes and all these envelopes should be sealed in a fourth envelope. The Part – III (Price Bid) of only such bidders would be opened who qualify in the Part – I (Eligibility bid) and Part-II (Technical bid).
- 6.8 The Part-I (Eligibility bid) should be sealed in an envelope super scribed (i) NIT NO.(ii) “Part-I Eligibility Bid”.

- 6.9 The **Part-II (Technical Bid)** should be sealed in an envelope super scribed with (i) NIT NO.(ii) “Part-II Technical Bid”, (iii) Name and address of the contact person of the bidding firm, and (iv) should be addressed to Director, JREDA.
- 6.10 Part –II (Technical Bid) should not contain price of any item. Such cases, even if found anywhere, shall not be given any cognizance.
- 6.11 The **Part-III (Price Bid)** should be sealed in an envelope super scribed with NIT No., “Part – III Price Bid”, Name and address of the contact person of the bidding firm, and should be addressed to Director, JREDA. This envelope should contain the following :
- (i) It should contain only Performa as prescribed at **Annexure-5** duly filled, signed and stamped by authorized signatory of the bidder.
- 6.12 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.
- 6.13 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.
- 6.14 All, **Part-I, Part – II and Part – III** of the bid document should be sealed in a fourth envelope. The fourth envelope should be sealed and super scribed (i) NIT No., (ii) "Offer for Supply, Installation and Commissioning of 1.0 kWp& 2.0 kWp Capacity SPV Power Plants in Panchayat & Block Offices” (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 Performa as prescribed at **Annexure-12** 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 Other Terms & Conditions

- 10.1 Insertion, post-script, addition and alteration shall not be recognized unless confirmed by bidder's signature and stamp.
- 10.2 Incomplete tender or tenders not submitted as per requirement as indicated in the NIT are likely to be rejected.

- 10.3 Bidders shall submit their offer strictly as per terms and conditions of the tender document without any deviation.
- 10.4 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.
- 10.5 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.
- 10.6 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.
- 10.7 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.
- 10.8 No postal transaction shall be entertained for obtaining bid documents.
- 10.9 Issuance of bid documents shall not construe that the bidders would be automatically considered qualified.

General Terms & Conditions

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 general scope of work under this rate contract includes design, manufacture, supply, total system integration, shop testing, inspection, packing & forwarding, transportation up to project site, loading & unloading, storage in safe custody, erection, carrying out preliminary tests at site, connecting system to the load points using cable (wiring) and sockets, commissioning, performance testing & handing over to the Panchayats/Blocks, all the equipment installed including the insurance coverage from the concept to commissioning including operation and comprehensive maintenance contract.

3.0 Bid documents

Tender documents shall comprise of all the documents mentioned in the table of contents of this 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 offers, shall also be deemed to be integral part of the bid document.

4.0 Price

The bidder shall quote his price as per schedule of items of work. The contract price rates shall be firm and binding and shall not be subject to any variation except for statutory variation of taxes and duties during the contractual completion period. ***The price shall be inclusive of all taxes, duties and levies including Jharkhand Vat etc. as on the opening date of tender.*** The price shall also include designing, manufacturing, inspection, supply, transport, insurance, handling, erection at site including cabling with plug & socket, testing, commissioning & 5 years CMC. All applicable charges for taking necessary clearance such as commercial tax, road permit etc. wherever required are also deemed to be included in the contract price.

5.0 Inspection of the factory and Tests

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

6.0 Payment terms and conditions

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

- (a) **50%** of the Contract Price shall be paid against supply and delivery of goods in full and in good condition as certified by Mukhiya /Panchayat Sewak/BDO &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-9** should be submitted in three sets (one for Panchayat/ Block Office record, one for JREDA Hq. and one for JREDA's field Executive Engineer.
 - iv. Photographs of all the equipments (materials) at destination with signature & seal of Mukhiya /Panchayat Sewak/ BDO & JREDA Officials. This record should be kept in the office of Mukhiya//Panchayat Sewak /BDO for verification.
- (b) **40%** of the Contract Price shall be paid against installation, testing & commissioning after submission of following documents:
 - i) Copy of Original Commercial invoice raised at the time of supply in triplicate (1+2).
 - ii) Duly filled **Annexure-10**
 - iii) Certificate for minimum seven days of satisfactory performance.
- (c) Rest **10%** of the Contract Price shall be paid @**2%** of the Contract Price on completion of every one year period of the 5 year CMC period, after submission of following documents: :
 - i) Copy of Original Commercial invoice raised at the time of supply in triplicate (1+2).
 - ii) Submission of quarterly reports of CMC undertaken by the manufacturer.

7.0 Dispatch Instructions

All items/equipments shall be subject to pre-dispatch inspection by JREDA or its authorized representatives before their dispatch. The manufacturer will submit test report with regard conformity to technical specifications for the items to be dispatched to JREDA. However, equipments will be dispatched only after the receipt of "Dispatch Clearance" from JREDA after acceptance of test report. No consignment shall be dispatched without the receipt of dispatch clearance from JREDA.

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 Power Plant.

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.

In case, the installation & commissioning and CMC is planned to be carried out in collaboration with other party, the bidder has to sign MoU with the party on a Non-judicial stamp paper and submit a copy of the MoU to JREDA. The MoU shall clearly indicate division of scope of work between the prime bidder and his sub-vendor. However, the total responsibility of work will remain with the prime bidder.

12.0 Completeness of Tender

All fittings, assemblies, accessories, hardware items, civil & electrical works including cabling, wiring 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 Five Years Comprehensive Maintenance Contract (CMC)

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

The Comprehensive Maintenance Contract shall include servicing & replacement guarantee for parts and components (such as battery, electronics, Inverter, PV modules and other hardware) of Solar Photovoltaic Power Plant for five years from the date of installation. For PV modules, the replacement guarantee is for Twenty five (25) years. Battery should be warranted for a minimum life of 5 years. The date of CMC maintenance period shall begin on the date of actual commissioning of Solar Photovoltaic Power Plant. 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.

16.1 Preventive/Routine Maintenance

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

16.2 Breakdown/Corrective Maintenance

- 16.2.1 Whenever a complaint is lodged by the user, the bidder shall attend the same immediately. It is clarified that effective CMC means that, the bidder should ensure 24 hours smooth working of all the power plants throughout the CMC period and therefore, if any complaint in this level of service is found by the JREDA officials and if the bidder do not attend the rectification of any such defects within three days of communication of such complaint to the bidders, the bidder will be liable for a penalty of Rs. 200 per day beyond three days of reporting of such complaint.
- 16.2.2 For carrying out the CMC effectively, the Bidder/Manufacturer shall establish Common Service Centre (CSC) at the district headquarter.

17.0 Force Majeure conditions

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

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

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

18.0 Jurisdiction of the Court

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

Technical Specification of Solar Photo Voltaic Power Plant of 1.0 kWp and 2.0 kWp Capacity

1. General Description :

The Solar Photovoltaic Power Plant shall have capacity of 1.0 kWp & 2.0 kWp to cater the electricity demand of 5-6 hours duration/day. The system should have the autonomy of 2 consecutive sunless days and shall have the provision of charging battery bank through mains as well. It should be designed such that during sunny hours the loads are fed from SPV Power Plant in addition to battery charging. The Power Plant shall provide a reliable and independent power supply at a voltage and frequency levels to suit the grid voltage and frequency.

A typical Solar Photovoltaic Power Plant comprises of PV module for charging the battery, solar deep charging battery for storage, a Charge Controller for intelligent charging, discharging & protection of the battery, an Inverter for conversion from DC to AC and complete set of hardware for proper performance and functioning of the system.

2. Major components and sub-systems of Solar PV Power Plant

a. Solar PV modules and array

The Crystalline Silicon PV modules must be manufactured indigenously & confirm to the latest editions of IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 part I – requirement for construction and part – II requirement for testing, for safety qualification or equivalent IS. The bidder shall submit appropriate IEC/equivalent BIS certificate. Each Solar module shall have the Peak Power rating of not less than 125Wp. Each PV module must use a RF identification tag (RFID) and shall be placed inside the module laminate, which must contain the following information:

- i. Name of the manufacturer of PV module.
- ii. Name of the manufacturer of Solar cells.
- iii. Month and year of the manufacture (separately for solar cells and module).
- iv. Country of origin (separately for solar cells and module)
- v. I-V curve for the module.
- vi. Peak Wattage, I_m , V_m and FF for the module.
- vii. Unique Serial no. and model no. of the module.
- viii. Date and year of obtaining IEC PV module qualification certificate.
- ix. Name of the test lab issuing IEC certificate.
- x. Other relevant information on traceability of solar cells and module as per ISO 9000 series.

PV modules used in solar power plants/systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

The following details shall be screen printed in indelible ink or thermal sticker on the back side of each PV module so as to be clearly visible from the back side:-

- (a) Solar Photovoltaic Program 2012-13.
- (b) NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13
- (c) Not for sale or transfer
- (d) Statutory action would be taken by JREDA, if it found sold or transferred under different Sections of IPC.

b. Module Mounting Structure

Array support structure shall be fabricated using corrosion resistant GI (40 mmx 40 mmx5 mm) or anodized aluminium or equivalent metal sections. Minimum thickness of galvanisation should be 80 microns. The vendor shall produce a third party certificate in proof. Test Certificate from approved laboratory shall be provided

- a) Array support structure fabricated with alternate material shall have equivalent degree of protection
- b) Array support structure welded joints and fasteners shall be adequately treated to resist corrosion.
- c) The support structure shall be free from corrosion when installed.
- d) PV modules shall be secured to support structure using screw fasteners and/or metal clamps. Screw fasteners shall use existing mounting holes provided by module manufacturer. No additional holes shall be drilled on module frames. Module fasteners/clamps shall be adequately treated to resist corrosion.
- e) The support structure shall withstand wind loading of up to 150 km/hr.
- f) Adequate spacing shall be provided between any two modules secured on PV panel for improved wind resistance.
- g) The structure shall be designed to withstand operating environmental conditions for a period of minimum 25 years.

The structures shall be compatible for on roof and on ground installation (Bidder awarded with Work-order for specific location shall visit where the installation is to be done).

- c. **Junction Box:** The junction boxes shall be as per MNRE specifications IP54 (for outdoor) as per IEC 529.
- d. **Power Conditioning Unit (PCU) – 48V, 1KVA for 1kWp Plant & 48V, 2KVA for 2kWp Plant**
Power Conditioning Unit (PCU) provides an un-interrupted AC power using battery bank. Array output will be fed to PCU which consists of MPPT based Charge Controller, Inverter, Voltage Stabilizer and distribution panel along with necessary Displays, Indicators and Alarms and major protections and should conforming to IEC 61683/ IS 61683 Standard for efficiency measurement should conform to IEC 60068-2(1, 2, 14, 30) or equivalent BIS standard for environmental testing. The power conditioning unit shall convert DC Power by SPV modules and store in battery bank and good quality AC Power output is delivered. Bidders should enclose an undertaking that the PCU supplied conform the performance as per MNRE requirements/specifications.

Common Technical Specification:

- Switching device IGBT/MOSFET Type MPPT based charger to charge 48 V(nominal) battery bank with >90% solar charge controller efficiency
- Input voltage from PV array 48 V (nom)
- It shall have MCB of suitable rating for connection and disconnection of PCU from load.

Protections:

- Short circuit protection
- Input under voltage / Deep discharge of battery
- Input surge voltage protection
- Over current
- Battery reverse polarity protection
- Solar array reverse blocking diode (provided in array junction box)
- DC rated fuse at input and AC rated fuse at output with suitable contactor/solid-state switches for safe start-up & shutdown of system
- Ambient operation (max) 50 degree Celsius
- Relative humidity 95% maximum

- Finish Epoxy powder coating
- Load test at factory minimum 6 hours at full load

Features

- Bi-directional type inverter 1KW / 2 KW with mains Battery charging current of 35 A / 70 A
- Stand-alone and hybrid mode of operation.
- High quality with high efficiency and reliability
- Microprocessor based intelligent controller
- Self monitoring capability and status monitoring through GPRS.
- Highly reliable & efficient solid-state switching devices
- Rated for continuous operation at full load
- High over-load capability of 200% surge for 10 seconds
- Inverter output power factor of 0.8 lag
- Efficiency : $\geq 90\%$ at rated load and normal operating conditions
83% (min) at 25% load and nominal input voltage with UPF load
- THD : Sine wave output, with less than 4% THD at full load UPF and nominal input voltage
- Output voltage 230V +/- 1%
- Output frequency 50Hz \pm 0.5Hz
- Indications :
 - Inverter ON
 - Grid ON
 - Array ON
 - Inverter Under Voltage /Over Voltage
 - Inverter Overload /Inverter Over Temperature
 - Battery Low
- Enclosure IP 30 (For indoor application)
- Temperature compensated battery charging feature

e. **Battery Bank [48V, 200Ah for 1.0kWp and 48V, 400Ah for 2.0kWp Solar Power Plant]**

The batteries shall be for SPV application Lead Acid type AGM-VRLA or Tubular Gel.

The batteries shall use 2V battery capacity to be designed for C10 rate. Charging instructions shall be provided along with the batteries. A suitable battery rack with interconnections & end connector shall be provided to suitably house the batteries in the bank. Battery shall conform as per IEC 61427 and / relevant IS specifications as per MNRE requirements. Undertaking letter of complying the above specifications must be submitted along with the bid. The Battery should be warranted for a period of 5 years.

Features:

- The batteries shall be for SPV application and shall be Lead Acid type AGM-VRLA or tubular Gel.
- The batteries shall use 2V battery capacity to be designed for C10 rate.
- Charging instructions shall be provided along with the batteries.
- A suitable battery rack with interconnections & end connector shall be provided to suitably house the batteries in the bank.
- The batteries shall be suitable for recharging by means of solar modules via incremental / open circuit regulators.
- Battery interconnecting links shall be provided for interconnecting the battery in series and in parallel as needed and shall be Lead coated heavy duty copper strips.
- Connectors for inter cell connection (series / parallel) shall be maintenance free screws. Front covers shall be provided for each battery bank.
- Operating range: 0°C to +60°C.
- AH Efficiency: >95% and WH Efficiency: >85%
- Recombination Efficiency shall be >98%
- Self Discharge of battery shall be <0.5% per week at 27°C.
- Container of battery shall be Poly Propylene Co Polymer.
- **The minimum life of the Battery should be 5 years.**

Undertaking letter from the manufacture complying the above specification must be submitted along with the Bid,

f. AC Distribution Board and DC Distribution Board

An ACDB shall be provided in between PCU and Loads. It shall have MCB of suitable rating for connection and disconnection of PCU from load. It shall have MCB's to supply power to control room loads such as fans, lighting loads and power plug sockets etc. It shall have energy meter to record energy supplied to loads

DCDB shall consist MCCBs of suitable specifications which can withstand respective flow of current, with the purpose of providing the option for isolating the battery bank & SPV arrays. Best quality Ah meter has to be installed to measure the cumulative charging & discharging status of battery bank. .

g. Earthing and Lightning Arrestor

The SPV Power Plant should be provided with lightning and over voltage protection. The principal aim in this protection is to reduce the over voltage to a tolerable value before it reaches the PV or other sub-systems components. The source of over voltage can be lightning or any other atmospheric disturbances.

The array structure of the PV yard shall be grounded properly using adequate number of earthing kits. All metal casing / shielding of the plant shall be thoroughly grounded to ensure safety of the power plant.

h. Cables and Accessories

All the cables and accessories including switches / circuit breakers / connectors shall be as per MNRE specification i.e. cables should conform to IEC 60227/ IS 694 and IEC 60502/ IS 1554 (Part – I & II) and switches / circuit breakers / connectors should conform to IEC 60947 (Part-I, II & III) or IS 60947 (Part-I, II & III) EN 50521.

3. Transmission & Distribution Voltage

For the power plant : The output voltage shall be 230 V, I-Phase, 50 Hz supplied by Single Inverter.

4. Battery room and control room

The control room & the battery room shall be provided by the end users.

5. Spares & Inventory

- After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the contractor for maintenance purpose. A list of tools supplied must also be furnished by the contractor.
- A list of requisite spares to keep the system in operation without any breakdown shall be supplied along with equipments.
- A minimum set of spares shall also be maintained for the entire period of warranty and operation & maintenance.
- Any other items for smooth & proper functioning of the system.

6. Quality and adaptability of the equipment

Interested Companies must verify the grid behavior, solar insolation levels and general site conditions on their own before bidding. The bidder shall accordingly ensure that the equipment and the design submitted shall be able to perform as per guaranteed performance levels in the available site conditions. The design of the plant and the equipment offered shall be evaluated for its quality and adaptability to the site conditions.

7. Manpower Training

The supplier/contractor shall train the users for the operation & maintenance of the plant.

Covering Letter

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

To,

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

Sub: Offer in response to **NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13.**

Sir,

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

We confirm that, we have the capability to supply and install the required no of systems per month.

The tender is submitted in three separate and sealed envelopes marked Part-I, Part-II& Part-III.

Authorized Signatory

Name:

Designation:

Company Seal:

Check List of Eligibility bid

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

S.No.	Particulars	Yes / No	Flag No.*
1	Covering Letter as per Annexure-1 .		I
2	Information about the bidder as per Annexure-6 .		II
3	The bidder is registered PV System Integrator or Manufacturing company of SPV cells or PV Modules or Battery or PV System Electronics confirming to relevant National/International Standards (Attach relevant certificates of Industry Department or MNRE).		III
4	To indicate the functionality of the firm attach the balance sheet of last three years ending 31.03.2012 of the firm duly certified by statutory Auditor.		IV/V/VI
5	Registration certificate of MSME of Jharkhand State (Enclose certificate issued by Industry Department, Govt. of Jharkhand).		VII
6	The proof of supply & installation of at least 125.0 kWp capacities SPPP for general bidder &50.0 kWp capacity for MSME bidder of Jharkhand in any SNA/Govt. organization/PSU in the last seven years. Attach copy of the order and certificate indicating its successful execution.		VIII/IX Series
7	IEC/IS certificates for Solar PV Module (Attach relevant certificate).		X
8	IEC/IS certificate for PCU and test certificate of Inverter (Attach valid relevant certificates).		XI
9	Certificate of Battery (Attach valid certificate).		XII
10	A copy of valid VAT/ TIN registration certificate		XIII
11	Undertaking from bidder that they have resources and capability to supply and install not less than 8% of the offered quantity per month as per Annexure-3 .		XIV
12	Average Annual Turn over for last three years ending 31.03.2012. (Attach average annual turn over certificate as per Annexure-12)		XV
13	Net worth as on 31.03.2012. (Attach proof & Net worth certificate as per Annexure-13)		XVI
14	The relevant document of formation of Association/ Consortium as per Annexure-14 .		XVII
15	Details of tender document fee (Bank Draft No. and Date)		XVIII
16	Details of Earnest money (Bank Guarantee No. and Date)		XIX

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

(Signature of Bidder)
With Seal

Format for Undertaking to confirm having capability & resources

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

To,

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

Dear Sir,

Sub: Bid for Design, Manufacture, Testing, Supply, Installation & Commissioning of 1.0 kWp& 2.0 kWp Capacity SPV Power Plants in Panchayat & Block Offices in all districts of Jharkhand on Turnkey basis Including 5 years CMC on the complete system.

We certify that we have the resources and capability to supply and install not less than 8% of the offered quantitykWp per month. We confirm that we are aware that these resources and capability have been assessed on the basis of MNRE benchmark cost for SPV Power Plant.

Signature of Chief Executive Officer/Managing Director

Date;

Note:

1. The above response sheet should be signed and certified as true by the Chief Executive Officer/Managing Director being full time Director.

Check List for Technical bid**NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13**

S.No.	Particulars	Yes / No	Flag No.*
1	Copy of bidder's ISO 9001 Certificate		I
2	Whether the bidder is MNRE accredited Off-Grid Channel Partner or a PSU or MSME registered with GoJ. Attach relevant certificate.		II
3	The average annual turnover of the Bidder in last three years on the basis of audited annual accounts. Attach relevant certificate as per Annexure-12 .		III
4	Proof of experience of the bidder in Supply, Installation & Commissioning of SPV Systems indicating the capacity installed. The copies of orders and completion certificates issued by purchaser/ SNA should be enclosed.		IV/V Series
5	Proof of past Experience (no. of years) of the Bidder in executing contracts on Design, Engineering, Supply, Installation, Erection, Testing and Commissioning of SPV Systems executed by the Bidder. The copies of order and completion certificate to indicate nos. of years for evaluation of year of experience should be enclosed.		VI/VII Series
6	Proof of Educational Qualifications of technical manpower of the firm.		VIII Series
7	Attach attested salary related documents in support of technical manpower.		IX Series
8	Proof of timely installation of SPV Systems solar home lights & solar street lights. This should be in form of a certificate issued by purchaser order wise for the capacity as being claimed at Sl. No. 4 above.		X Series
9	Technical details as per Annexure-8 .		XI
10	Declaration by bidder as per Annexure-7 .		XII
11	Product Leaflet/Catalogue (if any)		XIII

- ***Please flag the annexure and write flag number in the box.***

Please ensure:

- That all information is provided strictly in the order mentioned in the check list mentioned above.
- 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.
- 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 Bidder)
With Seal**

Price Bid

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

S.No.	Description	Total Bid Quantity	Price in Rupees	
			Unit Price (Rs.)	Total Price (Rs.)
1	2	3	4	5=3X4
1.	Cost of 1.0 kWp System on turn-key basis including transportation, Packaging, FOR destination, installation, Commissioning including cabling, wiring with sockets & inclusive of all taxes etc. with 5 Years Comprehensive Maintenance Contract (CMC)			
2	Cost of 2.0 kWp System on turn-key basis including transportation, Packaging, FOR destination, installation, Commissioning including cabling, wiring with sockets & inclusive of all taxes etc. with 5 Years Comprehensive Maintenance Contract (CMC)			

* The bidder should also give price break-up of material cost, installation cost & year wise CMC cost in separate sheet. However, the total cost will only be considered for the financial bid.

** The ranking of the bidder for 1.0kWp SPV Power Plant & 2.0kWp SPV Power Plant shall be evaluated separately.

Authorized Signatory

Name:

Designation:

Company Seal:

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

Information about the Bidding Firm

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

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

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

16.	Particulars of Earnest Money	
17.	Place where Materials will be Manufactured	
18.	Place where Materials will be Available for Inspection	
19.	Other details and remarks, if any	

Yours faithfully,
(Signature of Authorized Signatory)

Name :
Designation :
Company seal :

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

Declaration by the Bidder

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

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

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

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

Authorized Signatory

Name:

Designation:

Company Seal:

TECHNICAL DETAIL FORM**NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13**

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

S.No.	Particulars	Details
1	Mounting arrangement for Solar module	:
2	Solar module frame material	:
3	Module type	:
4	No. of solar cells per module	:
5	Make of Solar module (Attach IEC Certificate)	:
6	Country	:
7	Weather resistant HDPE junction Box (IP55)	:
8	Max. Temperature rise of solar cells under severe working condition over max. ambient temperature	:
9	Nominal voltage	:
10	Operating voltage of solar module (nom)	:
11	Peak power voltage (Vmp)	:
12	Peak Power current (Imp)	:
13	Open circuit voltage (Voc)	:
14	Short circuit current (Isc)	:
15	Make of PCU for 1.0 kW and Origin	:
16	Make of PCU for 2.0 kW and Origin	:
17	Make of Battery and Origin	:
18	Type of Battery	:
19	No. of Battery for 1.0 kW system	:
20	Each Battery Voltage for 1.0 kW system	:
21	Each Battery Ah for 1.0kW system	:
22	Battery Bank rating (voltage & Ah) for 1.0 kW system	:
23	No. of Battery for 2.0 kW system	:
24	Each Battery Voltage for 2.0 kW system	:
25	Each Battery Ah for 2.0 kW system	:
26	Battery Bank rating (voltage & Ah) for 2.0kW system	:

27. Undertaking

- a) We agree to manufacture and supply quality Solar Power Plant as per NIT specifications.
- b) We agree to give performance guarantee as specified and to abide by the scope of the guarantee as prescribed under the tender document.
- c) We agree to operate as per the terms & conditions of the tender.

We undertake to supply quality products for promoting energy efficiency in the era of lighting systems.

Signature of the Bidder _____

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

**Format for Certificate of Delivery of all the Equipments of Solar Power Plant received by the Consignee as
Proof of Compliance by the Supplier**

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

ik.ki

Consignee/ प्राप्त कर्ता का नाम : पदनाम:

विभाग का नाम:

विभागका पता :

प्रमाणित किया जाता है कि सोलर फोटोभोल्टाईक कार्यक्रम के अंतर्गत सोलर पावर प्लांट हेतु निम्नलिखित उपस्कर प्राप्त किये गये:-

1. सोलर मॉड्यूलस की संख्या एवं क्षमता-
2. मॉड्यूल हेतु स्ट्रक्चर की संख्या:.....
3. बैट्री की संख्या एवं प्रकार :.....
4. इन्वर्टर (पी0सी0यू0) की संख्या एवं प्रकार:.....
5. जंक्शन बॉक्स की संख्या:.....
6. तार आदि.....

इन सोलर उपस्करों की आपूर्ति मेसर्स द्वारा की गई है।

Consignee का हस्ताक्षर:

- (i) पंचायत सेवक / प्रखण्ड विकास पदाधिकारी का हस्ताक्षर
- (ii) पंचायत मुखिया का हस्ताक्षर.....

ज्रेडा प्रतिनिधि का प्रमाण-पत्र

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

Installation Certificate

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

ik.ki

प्रमाणित किया जाता है कि सोलरफोटोवोल्टेइक कार्यक्रम के अंतर्गत 1.0 kWp/ 2.0 kWp क्षमता का सोलर पावरप्लांट का अधिष्ठापन मेसर्स.....
..... द्वारा पंचायत..... प्रखण्ड....., जिला..... में
किया गया है। यह प्लांट पिछले सात दिनों से सुचारू रूप से कार्यरत है।

पंचायतसेवक / मुखिया / प्रखण्ड विकास पदाधिकारी

का हस्ताक्षर एवं मोहर

Format of Power of Attorney for Signing Bid

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

POWER OF ATTORNEY

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

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

as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for Design, Manufacture, Testing, Supply, Installation & Commissioning of 1.0 & 2.0 kWp Capacity SPV Power Plants in Panchayat & Block Offices in all districts of Jharkhand on Turnkey basis Including 5 years CMC on the complete system, 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:

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

FORMAT FOR FINANCIAL REQUIREMENT – ANNUAL TURNOVER

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

[On the letterhead of Bidding Company/ Lead member of Consortium/Association]

To,

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

Dear Sir,

Sub: Bid for Design, Manufacture, Testing, Supply, Installation & Commissioning of 1.0 & 2.0 kWp Capacity SPV Power Plants in Panchayat & Block Offices in all districts of Jharkhand on Turnkey basis Including 5 years CMC on the complete system.

We certify that the Bidding Company/Lead member of Consortium/Association had an average Annual Turnover of Rs. ----- based on audited annual accounts of the last three years ending 31.03.2012.

Authorised Signatory
(Power of Attorney holder)

Statutory Auditor
(Stamp & Signature)

Date;

FORMAT FOR FINANCIAL REQUIREMENT - Net Worth Certificate

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

[On the letterhead of Bidding Company/ Lead member of Consortium/Association]

To,

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

This is to certify that Net worth of _____ {insert the name of Bidding Company/ Lead member of Consortium/Association}, as on 31st March 2012 is Rs _____. The details are appended below.

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

Authorised Signatory
(Power of Attorney holder)

Statutory Auditor
(Stamp & Signature)

Format of Joint Deed Agreement among the members of Bidding Consortium/Association

NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

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

FORM OF JOINT DEED AGREEMENT BETWEEN

M/S....., M/S.....,

M/S..... AND M/S.....

For NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13

THIS Joint Deed Agreement executed on this..... day of Two thousand..... between M/s..... a company incorporated under the laws of..... and having its Registered Office at (herein after called the "Partner-1", which expression shall include its successors, executors and permitted assigns) and M/s..... a Company incorporated under the laws of and having its Registered Office at..... (hereinafter called the "Partner-2", which expression shall include its successors, executors and permitted assigns), M/s a Company incorporated under the laws of and having its Registered Office at (hereinafter called the "Partner-3", which expression shall include its successors, executors and permitted assigns) and M/s..... a Company incorporated under the laws of and having its Registered Office at (hereinafter called the "Partner-4", which expression shall include its successors, executors and permitted assigns), (The Bidder Consortium should list the details of all the Consortium Members) for the purpose of making a Bid and entering into the Implementation Agreement (in case of award) to be hereinafter referred to as the Contracts, against NIT NO: JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13 of Jharkhand Renewable Energy Development Agency (JREDA) having its Office at _____, Ranchi, Jharkhand.

WHEREAS, JREDA had invited Bids for Design, Manufacture, Testing, Supply, Installation & Commissioning of 1.0 & 2.0 kWp Capacity SPV Power Plants in Panchayat & Block Offices in all districts of Jharkhand on Turnkey basis Including 5 years CMC on the complete system vide its **NIT NO:JREDA/SPP/PANCHAYAT&BLOCK/02/2012-13**

AND WHEREAS the bidding document stipulates that the Bidders qualifying on the strength of a Bidding Consortium will have to submit a legally enforceable Joint Deed Agreement in a format specified by the JREDA.

NOW THEREFORE, THIS INDENTURE WITNESSTH AS UNDER:

In consideration of the above premises and agreements all the partners in this Consortium do hereby mutually agree as follows:

- In consideration of the Award of the Contract(s) by the JREDA to the Consortium, we the Members of the Consortium and partners to the Joint Deed Agreement do hereby unequivocally agree that partner (1) (M/s.....), shall act as the Lead Member for self and agent for and on behalf of Partner-2, Partner-3 and Partner-4 (the names of the partners to be filled in here).

The Lead Member is hereby authorised by the Members of Consortium and Partners to the Joint

Deed Agreement to bind the Consortium and receive instructions for and on their behalf. It is

further understood that the entire execution of the Contract shall be done exclusively by the Lead

Member.

- Notwithstanding anything contrary contained in this Agreement, the Lead Member shall always be liable for both its own liability as well as the liability of other Members.
- The Lead Member shall be liable and responsible for ensuring the individual and collective commitment of each of the Members of the Consortium in discharging all their respective obligations without in any way limiting the scope of collective liability envisaged in this Agreement.
- This Joint Deed Agreement shall be construed and interpreted in accordance with the Laws of India and courts at [_____] alone shall have the exclusive jurisdiction in all matters relating thereto and arising there under.
- It is hereby agreed that in case of an award of Contract, the partners to this Joint Deed Agreement do hereby agree that they shall furnish the Security Deposit in favour of JREDA, as stipulated in the bidding documents jointly, on behalf of the Consortium Members, in favour of the JREDA.
- It is further expressly agreed that the Joint Deed Agreement shall be irrevocable and shall form an integral part of the Contract and shall remain valid till the term of the Contract unless expressly agreed to the contrary by the JREDA.
- The Lead Member is authorised and shall be fully responsible for the accuracy and veracity of the representations and information submitted by the Consortium Members respectively from time to time in Bid to the purposes of the Project.
- It is hereby expressly understood between the partners to this Agreement that neither partner may assign or delegate its rights, duties or obligations under the Contract except with prior written consent of JREDA.

This Joint Deed Agreement

- has been duly executed and delivered on behalf of each Partner hereto and constitutes the legal, valid, binding and enforceable obligation of each such Partner,
- sets forth the entire understanding of the Partners hereto with respect to the subject matter hereof;
- may not be amended or modified except in writing signed by each of the Partners and with prior written consent of JREDA:

IN WITNESS WHEREOF, the partners to the joint Deed Agreement have, through their authorized representatives, executed these present and affixed Common Seals of their respective companies on the Day, Month and Year first mentioned above.

1. For M/s (Partner 1)

Common Seal of M/s.....

..... (Signature of the authorised representative)

have been affixed in my/ our presence pursuant to Board / Board of Directors Resolution dated Name.....

Signature..... Designation.....

2. For M/s (Partner 2)

Common Seal of M/s.....

.....
have been affixed in my/
our presence pursuant to
Board/Board of Directors Resolution
dated
Signature.....

(Signature of the authorised
representative)
Name.....
Designation.....

3. For M/s

(Partner 3)

Common Seal of M/s.....
.....
have been affixed in my/
our presence pursuant to
Board/Board of Directors Resolution
dated
Signature.....

(Signature of the authorised
representative)
Name.....
Designation.....

4. For M/s

(Partner 4)

Common Seal of M/s.....
.....
have been affixed in my/
our presence pursuant to
Board / Board of Directors Resolution
dated
Signature.....

(Signature of the authorised
representative)
Name.....
Designation.....