

**Bid Specifications for
Design, Manufacture, Testing, Supply, Installation &
Commissioning and Operation of 30 kWp SPV Power
Plant and 150 Nos. of LED Street Lights (50W)
including five years Comprehensive Maintenance
Contract on Turnkey basis
at Chandankiyari Chowk, Bokaro, Jharkhand.**

**(JREDA)
Government of Jharkhand**

Tender Reference No.: 11/JREDA/SPV/SPP/17-18



Jharkhand Renewable Energy Development Agency (JREDA)

3rd Floor, S.L.D.C. Building, Kusai Colony, Doranda, Ranchi-834002.

Ph.: 0651-2491161, Fax: 0651-2491165,

E-mail: info@jreda.com; Website: www.jreda.com

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Govt. of Jharkhand
Energy Department
Jharkhand Renewable Energy Development Agency (JREDA)
3rd Floor, S.L.D.C. Building,
Kusai Colony, Doranda, Ranchi-834002.
Ph.: 0651-2491161, Fax: 0651-2491165,
E-mail: info@jreda.com; Website: www.jreda.com

e-Procurement Notice

Tender Reference No.: 11/JREDA/SPV/SPP/17-18

Dated: 18.10.2017

1	Name of the work	Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.
2	Estimated cost	Rs. 75.00 lakhs
3	Time of completion	04 (Four) months
4	Date of publication of NIT on website: http://jharkhandtenders.gov.in	20.10.2017 (Friday)
5	Date & time of Pre-bid meeting	31.10.2017 (Tuesday) at 1.00 P.M.
6	Last date & time for receipt of online bids	13.11.2017 (Monday) up to 05:00 PM
7	Submission of original copies of Bid fee & EMD (Offline)	13.11.2017 and 14.11.2017 up to 5.00 P.M.
8	Technical Bid Opening Date	16.11.2017 (Thursday) at 03:00 PM
9	Name & address of office inviting tender	Director, Jharkhand Renewable Energy Development Agency(JREDA) 3 rd Floor, SLDC Building, Kusai, Doranda, Ranchi- 834002 (Jharkhand)
10	Contact no. of procurement officer	0651-2491163/61
11	Helpline no. of e-procurement	0651-2491163/61

Any change can be seen on website: <http://jharkhandtenders.gov.in> & www.jreda.com

Further details can be seen on website: <http://jharkhandtenders.gov.in> & www.jreda.com

**Director,
JREDA, Ranchi**

Section -1

NIB No: 11/JREDA/SPV/SPP/17-18

List of Important dates & details of Bids

1.	Name of work	Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.	
2	Tender reference no.	11/JREDA/SPV/SPP/17-18	
3	Completion period	04 (Four) months	
4	Mode of submission of tender	Online through www.jharkhandtenders.gov.in	
5	Tentative Quantity	30 kWp SPV Power Plant and 150 LED Street Lights	
6	Cost of Bid document (Non-refundable)	❖ For General Bidder: Rs. 10,000/- (Rupees ten thousand) only. ❖ For MSME of Jharkhand: Rs. Nil	
7	Earnest Money Deposit	❖ For General Bidder: Rs. 1.50 Lakh ❖ For MSME of Jharkhand: Rs. Nil	
8	Publishing on website	Date.20.10.2017 (Friday)	
9	Period of downloading of bidding documents	Start date: 21.10.2017	Time: 10.00 AM
		End date: 13.11.2017	Time: 05.00 PM
10	Date for pre-bid meeting, comments at info@jreda.com	31.10.2017 (Tuesday)	Time: 01.00 PM
11	Bid online submission	Start date: 05.11.2017	Time: 10.00 AM
		End date: 13.11.2017	Time: 05.00 PM
12	Technical bid opening date	Date. 16.11.2017 (Thursday)	Time: 03.00 PM
13	Authority inviting bids	Director, Jharkhand Renewable Energy Development Agency(JREDA)	
14	Address	Jharkhand Renewable Energy Development Agency(JREDA) 3 rd Floor, SLDC Building, Kusai, Doranda, Ranchi- 834002. Ph.No: 2491161,Fax No: 0651-2491165 Web site: www.jreda.com E-mail: info@jreda.com	

Note: The tender fee and Earnest Money Deposit (EMD) in original must be submitted between all working days from **13.11.2017 to 14.11.2017** by 5.00 PM. If tender fee and EMD are not received before mentioned date and time, tender shall not be accepted.

Place for receiving tender fee & EMD

Jharkhand Renewable Energy Development Agency (JREDA), 3rd Floor, SLDC Building, Kusai, Doranda, Ranchi- 834002.

Section-2

NIB No: 11/JREDA/SPV/SPP/17-18

Instructions to Bidders

Detailed instructions & documents to be furnished for online bidding

1. The guidelines to submit bid online can be downloaded from website <http://.Jharkhandtenders.gov.in>
 2. The interested bidders can download the bid from the website "<http://Jharkhandtenders.gov.in>".
 3. To participate in bidding process, bidders have to get 'Digital Signature Certificate (DSC)' as per Information Technology Act-2000 to participate in online bidding. This certificate will be required for digitally signing the bid. Bidders can get above mention digital signature certificate from any approved vendors (CCA). Bidders, who already possess valid Digital Certificates, need not to procure new Digital Certificate.
 4. The bidders have to submit their bids online in electronic format with digital Signature. The bids without digital signature will not be accepted. No proposal will be accepted in physical form.
 5. Bids will be opened online as per time schedule mentioned in Section 1
 6. Bidders should get ready with the scanned copies of cost of documents & EMD as specified in the tender document. Before submission of online bids, bidders must ensure that scanned copy of all the necessary documents have been attached with bid.
 7. Bidder have to produce the original D.D. towards tender fee & EMD in approved form to the authority "Director, Jharkhand Renewable Energy Development Agency, Ranchi" on the date & time as mentioned in the NIT failing which bidder will be disqualified. The details of cost of documents, EMD specified in the tender documents should be the same as submitted online (scanned copies) otherwise tender will summarily be rejected.
 8. Uploaded documents of valid successful bidders will be verified with the original before signing the agreement. The valid successful bidder has to provide the originals to the concerned authority.
 - i. The department will not be responsible for delay in online submission due to any reason.
 9. All the required information for bid must be filled and submitted online.
 10. Other details can be seen in the bidding documents.
- B. Details of documents to be furnished for online bidding
1. Scanned copies of the following documents to be up-loaded in pdf. format on the website <http://.Jharkhandtenders.gov.in>.
 - i. D. D. towards Tender fee.
 - ii. Duly pledged EMD (Annexure)
 - iii. CST/VAT certificate.
 - iv. PAN Card
 - v. Firm's registration certificate/ Registration certificate of MSME of Jharkhand.
 - vi. Certificate issued by Industry Dept. or MNRE for system manufacturing.
 - vii. Bid Capacity
 - viii. Audited Balance sheet of last three years.
 - ix. IEC/IS certificate of Solar PV module.
 - x. Test certificate of Battery.

- xi. IEC/IS certificate of Electronics & test certificate of PCU.
2. Scanned copies of the Annexure as per the enclosed formats should be uploaded after converting the same to .pdf format.
- i. Annexure-1 : Covering letter.
 - ii. Annexure-2 : Information about the bidding firm.
 - iii. Annexure-3 : Declaration by the bidder.
 - iv. Annexure-4 : Annual Turn over.
 - v. Annexure-5 : Net Worth certificate.
 - vi. Annexure-6 : Format for power of attorney for signing of bid.
 - vii. Annexure-7 : Proof of supply/execution of SPV Power Plant in any SNA/Govt. organization/PSU in the last seven years. Attach copy of orders & its satisfactory completion certificate.
 - viii. Annexure-8 : Technical details & make of the Equipments to be supplied.
 - ix. Annexure-10 : Bank Guarantee Format for EMD
 - X. Annexure-14 : Contact Person for the NIB
 - xii. Annexure-15 : Checklist for technical bid
3. Duly filled in & digitally signed Price Bid.
4. Uploaded documents of valid successful bidders will be verified with the original before signing the agreement. The valid successful bidder has to provide the originals to the concerned authority on receipt of such letter, which will be sent through registered post.
5. SBD is not to be uploaded by the bidder. The bidder has to give affidavit stating agree / disagree on the conditions in the SBD. The bidders, who disagree on the conditions of SBD, can not participate in the tender.

Section-3

NIB No: 11/JREDA/SPV/SPP/17-18

Notice Inviting Bid

Sub: Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.

Preamble:

As part of Solar Photovoltaic Programme, JREDA invites bid for **"Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand"** for short listing of experienced & eligible bidders to whom work shall be allocated for successful execution of the project in a defined time frame.

Part –I:-The Technical Conditions:

The bidder should fulfill the following Technical eligibility conditions:-

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 (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 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 audited balance sheet with profit & loss account for last 3 years or from the date of establishment to 31.03.2017, whichever is applicable. These audited 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 the Industry Department, Govt. of Jharkhand.
4. **Experience Requirement:**

For General Bidder: Bidder should have cumulative experience of executing contracts of supply & installation of at least **25% of Bid capacity of SPV Power Plant** 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 of at least **10% of Bid capacity of SPV Power Plant** to any SNA / Govt. Organization / PSU in the last seven years ending up to date of advertisement of this tender.

The copy of work order and certificate indicating its successful execution should be enclosed.

5. The offered PV Modules should be as per IEC61215 edition II / BIS 14286 from an NABL or IECQ accredited laboratory standards having test certificates prescribed by MNRE. The valid

- test certificate with authorization letter of the manufacturer should be uploaded as annexure. The offered PV Modules should be Crystalline Silicon PV Modules as per IEC 61215 Standards or IS14286 and having test certificates prescribed by MNRE. In addition, the modules must conform to IEC 61730 part I – requirement for construction and part – II requirement for testing, for safety qualification or equivalent IS. The offered modules shall be of standard make, specifications of any reputed brand approved by MNRE having test certificates issued from **MNRE specified** test laboratories.
6. The bidder must be in possession of valid test report of PCU & battery from any other test centre approved by MNRE. The valid test certificate should be submitted along with bid.
 7. Batteries should fulfil the requirement as per specification given at Technical Specification for Capacity Test Charge/Discharge efficiency Self-Discharge as per MNRE requirements and valid test reports with authorization letter of the manufacturer should be uploaded as annexure. The certificate should be in a form of an undertaking letter from the manufacturer complying all the technical specifications of battery. The offered batteries shall be standard make, specifications of any reputed brand approved and certified by MNRE. The bidder has to supply the battery of same make, specification and manufacturing brand for which test reports submitted in the tender otherwise the work order & agreement shall be terminated, the security deposit shall be forfeited and the bidder firms shall be black listed. Bidder can quote maximum three makes of batteries of MNRE approved and has to submit the authorization from each of the manufacturer along with the test certificate.
 8. The Participant should have valid PAN and GSTN which should be submitted with the tender document.
 9. The Bidder should confirm that they have the resources and capability to supply the offered quantity within the scheduled period in the form of an undertaking.
 10. **Turnover Requirement:**
For General Bidder: Bidder should have the minimum average Annual Turnover of **25% of Bid Capacity** derived from the last three financial years ending on 31.03.2017 on the basis of audited annual accounts.
For MSME of Jharkhand: Bidder should have the average Annual Turnover of **10% of Bid Capacity** derived from the last three financial years ending on 31.03.2017 on the basis of audited annual accounts.
The certificate should be as per the Performa given at **Annexure-4**
 11. **Net worth Requirement:**
For General Bidder: Bidder should have Positive Net Worth of minimum 10% of Bid Capacity as on 31.03.2017 on the basis of audited annual accounts.
For MSME of Jharkhand: Bidder should have Positive Net Worth of minimum 5% of Bid Capacity as on 31.03.2017 on the basis of audited annual accounts.
Net worth certificate should be as per the Performa given at **Annexure-5**
 12. Bidders have to download the bid document from website (www.jharkhandtenders.gov.in) and submit the scan copy of the cost of the bid document to be submitted in shape of demand draft of requisite value as mentioned in Section-1 (List of Important dates & details of Bids) in favour of "Director, JREDA" on any Indian Nationalized Bank/Scheduled Bank, payable at "Ranchi". The tender fee in original must be submitted from 13.11.2017 to 14.11.2017 by 05.00 PM in the office of JREDA.
 13. Bidders should submit in Part – I (Technical Bid) the earnest money in the form of Bank Guarantee of requisite value as mentioned in "Section-1 (List of Important dates & details of Bids)". The Bank Guarantee shall be made in favour of "Director, JREDA" payable at

Ranchi from any Indian Nationalized bank/Scheduled bank. The bank guarantee shall remain valid for 12 months. Only Original Bank Guarantee shall be accepted. The EMD fee in original must be submitted from 13.11.2015 to 14.11.2015 by 05.00 PM in the office of JREDA.

14. Allocation of the quantity to MSME registered in Jharkhand will be made as per the provisions of Jharkhand Procurement Policy 2014. The MSME should be functional & having running production unit of the Jharkhand and should fulfill all the criteria as fixed in Jharkhand Procurement Policy 2014. The corporate office or the head office of the MSME must be located in the State of Jharkhand. The manufacturing unit of the MSME must be located in Jharkhand State.

SECTION-4

NIB No: 11/JREDA/SPV/SPP/17-18

INSTRUCTIONS TO BIDDERS
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18	Sealing and Marking of Bids		

Instructions to Bidders (ITB)

A. General

- 1 Scope of Bid
- 1.1 The JREDA invites bids for the work as described in these documents and referred to as "the works". The name and identification number of the works is provided in the Notice Inviting Bid.
- 1.2 The successful Bidder will be expected to complete the Works by the Intended Completion Date specified in the Part (I)- General Conditions of Contract.
- 1.3 Throughout these documents, the terms "bid" and "tender" and their derivatives (bidder/ tenderer, bid/ tender, bidding/ tendering) are synonymous.

2 Source of Funds

- 2.1 The JREDA has decided to undertake the works of "**Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand**" through funds from the Government of India, Government of Jharkhand & Beneficiary, to be implemented through JREDA.

3 Eligible Bidders

- 3.1 This Invitation for Bids is open to all bidders as defined in the Notice Inviting Bid.
- 3.2 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices by the Central Government, the State Government or any public undertaking, autonomous body, authority by whatever name called under the works.

4 Qualification of the Bidder

- 4.1 All bidders shall provide in Section 3, Forms of Bid and Qualification information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.
- 4.2 All bidders shall include the following information and documents with their bids in Section 3, Qualification Information unless otherwise stated in the Notice Inviting Bid/ITB.
 - a) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business.
 - b) Copy of written power of attorney of the signatory of the Bid to commit the Bidder.
 - c) Total monetary value of the similar nature of the works performed for each of the last seven years;
 - d) Experience in works of a similar nature and size for each of the last seven years, and details of works in progress or contractually committed with certificates from the concerned officer or competent authority.
 - e) Evidence of ownership of one of the component of SPV Power Plant i.e. Solar PV module/PCU/Batteries or MNRE channel partner or MSME of Jharkhand.
 - f) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the last three years.

- g) An undertaking that the bidder will be able to invest a minimum of cash up to the 10 percentage of the contract price of works, during the implementation of the works;
- h) Evidence of access to line(s) of credit and availability of other financial resources/ facilities (10 percent of the contract value) certified by banker (the certificate being not more than 3 months old.)
- i) Authority to seek references from the Bidder's bankers;
- j) Information regarding any litigation or arbitration during the last seven years in which the Bidder is involved, the parties concerned, the disputed amount, and the matter;
- k) The proposed methodology and programme of construction, backed with equipment and material planning and deployment, duly supported with broad calculations and Quality Management Plan proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications and within the stipulated period of completion.

4.3 Bids from joint venture are not allowed.

4.4.A To qualify for award of the Contract, each bidder should have in the last five years:

a) **Annual Turn Over:**

For General Bidder: Bidder should have the minimum average Annual Turnover of **25% of Bid Capacity** derived from the last three financial years ending on 31.03.2017 on the basis of audited annual accounts.

For MSME of Jharkhand: Bidder should have the average Annual Turnover of **10% of Bid Capacity** derived from the last three financial years ending on 31.03.2017 on the basis of audited annual accounts.

The certificate should be as per the Performa given at **Annexure-4**

b) **Net worth Requirement:**

For General Bidder: Bidder should have Positive Net Worth of minimum 10% of Bid Capacity as on 31.03.2017 on the basis of audited annual accounts.

For MSME of Jharkhand: Bidder should have Positive Net Worth of minimum 5% of Bid Capacity as on 31.03.2017 on the basis of audited annual accounts.

Net worth certificate should be as per the Performa given at

Annexure-5

c) **Experience:**

For General Bidder: Bidder should have cumulative experience of executing contracts of supply & installation of at least **25% of Bid capacity of SPV Power Plant** 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 of at least **10% of Bid capacity of SPV Power Plant** 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 certificate indicating its successful execution should be enclosed with the check list as at **Annexure-7**.

- 4.4.B (a) Each bidder must produce:
- i) The current income-tax clearance certificate/PAN.
 - ii) An affidavit that the information furnished with the bid documents is correct in all respects; and
 - iii) Such other certificates as defined in the Notice Inviting Bid. Failure to produce the certificates shall make the bid non-responsive.
- 4.4.C To qualify for a package of contracts made up of this and other contracts for which bids are invited in the Notice Inviting Tender, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts.
- 4.5 Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity for work is equal to or more than the total bid value. The available bid capacity will be calculated as under:
where
Assessed Available Bid capacity = [(A x N x 2) - B]
A = Maximum value of solar related works executed in any one year during the last five years taking into account the completed as well as works in progress.
N = Number of years prescribed for completion of the works for which bids are invited (period up to 6 months to be taken as half-year and more than 6 months as one year).
B = Value, at the current price level, of existing commitments and on-going works to be completed during the period of completion of the works for which bids are invited.
- Note : The statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Competent Authority.
- 4.6 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
- i) made misleading or false representations in the forms, statements, affidavits and attachments submitted in proof of the qualification requirements; and/or
 - ii) record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures
 - iii) Participated in the previous bidding for the same work and had quoted unreasonably high or low bid prices and could not furnish rational justification for it to JREDA.

5 One Bid per Bidder

- 5.1 Each Bidder shall submit only one Bid for one work. A Bidder who submits more than one Bid will cause the proposals with the Bidder's participation to be disqualified.

6 Cost of Bidding

- 6.1 The Bidder shall bear all costs associated with the preparation and submission of his Bid, and the JREDA will, in no case, be responsible or liable for those costs.

7 Site Visit

- 7.1 The Bidder, at his own cost, responsibility and risk, is encouraged to visit, examine and familiarise himself with the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for supply & installation of the Works. The costs of visiting the Site shall be at the Bidder's own expense. He may contact the person whose contact details are given in the Notice Inviting Bid.

B. Bidding Documents

8 Content of Bidding Documents

- 8.1 The set of bidding documents comprises the documents listed below and addenda issued in accordance with Clause 10 of ITB.
1. Notice Inviting Tender
 2. Instructions to Bidders
 3. Qualification Information
 4. Conditions of Contract
 5. Specifications
 6. Bill of Quantities
 8. Form of Bid
 9. Form of Bank Guarantee.

- 8.2 The bidder is expected to examine carefully all instructions, conditions of contract, contract data, forms, terms and specifications, bill of quantities, forms in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the

bidder's own risk. Pursuant to clause 23 hereof, bids, which are not substantially responsive to the requirements of the Bid Documents, shall be rejected.

9 Clarification of Bidding Documents and Pre-bid Meeting

- 9.1 A prospective Bidder requiring any clarification of the bidding documents may notify the JREDA in writing at the JREDA's address indicated in the Notice Inviting Tenders. Copies of the JREDA's response will be uploaded in form of corrigendum on our website www.jreda.com.
- 9.2.1 Pre-bid meeting will be held on **31/10/2017 (Tuesday) at 01.00 P.M.** in the Conference Hall of JREDA. The bidder or his authorized representative may attend the meeting.
- 9.2.2 The purpose of the such a meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 9.2.3 The bidder is requested to submit any questions in writing or by e-mail so as to reach the JREDA not later than two days before the meeting.
- 9.2.4 Any modifications of the bidding documents listed in Clause 8.1 of ITB, which may become necessary as a result of the pre-bid meeting shall be made by the JREDA exclusively through the issue of an Addendum/Corrigendum pursuant to Clause 10 of ITB on website.
- 9.2.5 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

10 Amendment of Bidding Documents

- 10.1 Before the deadline for submission of bids, the JREDA may modify the bidding documents by issuing addenda/corrigendum.
- 10.2 To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the JREDA shall extend, if necessary, the deadline for submission of bids, in accordance with Clause 19.2 of ITB.

C. Preparation of Bids

11 Language of Bid

- 11.1 All documents relating to the Bid shall be in the language specified in the Notice Inviting Bid.
- 12 Documents Comprising the Bid

A. Technical Bid – (Fee/Pre-Qualification/Technical Cover)

1) EMD & Tender Fee

- a) Scanned Copy of Demand draft drawn in favour of "DIRECTOR, JREDA", payable at Ranchi towards Cost of Tender Fee and Earnest Money Deposit as specified in the Notice Inviting Bid.

2) Technical Details & Declaration

- a) Proposed work programme (work method, time schedule and financial flow), description, and charts as necessary (Duly to be signed digitally) to comply with the requirement of the Bidding Document.
- b) Scanned copy of an Affidavit by the Bidder that he/she has accepted the S.B.D.

3) Technical Details of documents

Scanned copies/Prescribed Formats of Documents to be attached in "My Document" in .pdf format file duly digitally signed by the bidder.

- a) PAN Card
- b) GST Certificate.
- c) Proof of completion of similar works during the last 7 years and list of similar works in hand in the prescribed formats duly signed by the competent authority of the issuing Department.
- d) List of works for which bids already submitted.
- e) Financial Report for the last 3 years (upto 31/3/2017) certified by chartered Accountant.
- f) Annual Turn over Details certified by Chartered Accountant.
- g) Net worth certificate certified by Chartered Accountant.
- h) List of current litigant cases in which the bidder is involved.
- i) An affidavit for non-engagement of related persons.
- j) Proof of test certificates solar PV module, batteries and PCU. The valid test certificate should be submitted along with bid.
- k) Authorized address & contact numbers of the bidder as per instruction in the Notice Inviting Bid duly digitally signed.
- l) Bid Capacity

- m) Undertaking of Bidder that he is able to invest minimum of cash upto 10% as defined in ITB.
- n) Undertaking for validity of bid for 180 days.

B – Financial Bid – (Finance Cover)

- i) Duly Quoted & digitally signed Bill of Quantity (BoQ) in the file supplied by JREDA in .xls format shall be uploaded.
- ii) Declaration by Bidder in the format Section – 6 form of Bid in .pdf format.

NOTE:- a) All the documents should be digitally signed.

12.2 The following documents, which are not submitted with the bid, will be deemed to be part of the bid.

Section Particulars

- i. Notice inviting Tender
- ii. Instruction to the bidders
- iii. Conditions of Contract
- iv. Contract Data
- v. Specifications
- vi. Drawings if any

13 Bid Prices

- 13.1 The Contract shall be for the whole Works, as described in Clause 1.1 of ITB.
- 13.2 The Bidder shall adopt the Item Rate Method as specified in the Notice Inviting Bid only the same option is allowed to all the Bidders.
- 13.3 All duties, taxes, royalties and other levies payable by the Contractor under the Contract, or for any other cause, shall be included in the rates, prices, and total Bid price submitted by the Bidder.
- 13.4 The rates and prices quoted by the Bidder shall be fixed for the duration of the Contract and shall not be subject to adjustment.
- 13.5 Quoted price for solar pumps shall be 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.
- 13.6 Tenderers should quote their rates considering wide variation of site conditions, variation in price of different components during the year 2015-16 and keeping the quantum and quality of work in mind. If JREDA anticipates that rate is abnormally low or high, tender may be cancelled.

14 Currencies of Bid

- 14.1 The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees (INR).

15 Bid Validity

- 15.1 Bids shall remain valid for a period of 180 (One hundred Eighty) days after the deadline date for bid submission specified in Clause 19 of ITB. A bid valid for a shorter period shall be rejected by the JREDA as non-responsive.
- 15.2 In exceptional circumstances, prior to expiry of the original time limit, the JREDA may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his Earnest Money. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his earnest money for a period of the extension, and in compliance with Clause 16 of ITB in all respects.

16 Earnest Money

- 16.1 The Bidder shall furnish, as part of the Bid, Earnest Money, in the amount specified in the Notice Inviting Bid.
- 16.2 The Earnest Money shall, at the Bidder's option, be in the form of Bank Guarantee/Demand Draft of a scheduled commercial bank, issued in favour of the name given in the Notice Inviting Bid. The Bank Guarantee shall be valid for 12 months or more after the last date of receipt of bids. Other forms of Earnest Money acceptable to the JREDA are stated in the Notice Inviting Bid.
- 16.3 Any bid not accompanied by an acceptable Earnest Money, unless exempted in terms given in the Notice Inviting Bid, shall be rejected by the JREDA as nonresponsive.
- 16.4 The Earnest Money of unsuccessful bidders will be returned within 30 days of the end of the Bid validity period specified in Clause 15.1 of ITB.

- 16.5 The Earnest Money of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the required Security Deposit.
- 16.6 The Earnest Money may be forfeited:
- a) if the Bidder withdraws the Bid after bid opening (technical bid) during the period of Bid validity;
 - b) in the case of a successful Bidder, if the Bidder fails within the specified time limit to
 - i. sign the Agreement; and/or
 - ii. Furnish the required Performance Security and Security Deposit.

17 Alternative Proposals by Bidders

- 17.1 Bidders shall submit offers that comply with the requirements of the bidding documents, including the Bill of Quantities and the basic technical design as indicated in the drawings and specifications. Alternative proposals will be rejected as non-responsive.

D. Submission of Bids

18 Sealing and Marking of Bids

- 18.1 The Bidder shall place the two separate files (File I) marked "Technical Bid" and "Financial Bid" (File -II). The file will have markings as follows:
Technical Bid: To be opened on (date and time of Technical Bid opening as per clause 20.1 of ITB.)
Financial Bid: Not to be opened except with the approval of JREDA.
The contents of the Technical and Financial Bids shall be as specified in clause 12.1 of ITB. All documents are to be signed digitally by the bidder.
- 18.2 The first and second files containing the Technical and Financial Bids shall a) be addressed to the JREDA at the address provided in the Notice Inviting Bid b) bear the name and identification number of the Contract as defined in clause 1.1 of ITB; and c) provide a warning not to open before the specified time and date for Bid opening as defined in clause 20.1 of ITB.

19 Deadline for Submission of Bids

- 19.1 Complete Bids (including Technical and Financial) must be received by the JREDA at the address specified in the Notice Inviting Bid not later than the date and time indicated in the Notice Inviting Bid.
- 19.2 The JREDA may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10.3 of ITB, in which case all rights and obligations of the JREDA and the bidders previously subject to the original deadline will then be subject to the new deadline.

E. Bid Opening and Evaluation

20 Bid Opening

- 20.1 The JREDA will open the bids received (except those received late). In the event of the specified date for the submission of bids being declared a holiday for JREDA, the Bids will be opened at the appointed time and location on the next working day.
- 20.2 The files containing the technical bid shall be opened. The document marked "cost of bidding document" will be opened first and if the cost of the bidding documents is not there, or incomplete, the remaining bid documents will not be opened, and bid will be rejected.
- 20.3 In all other cases, the amount of Earnest Money, forms and validity shall be announced. Thereafter, the bidders' names and such other details as the JREDA may consider appropriate, will be announced by the JREDA at the opening.
- 20.4 The JREDA will prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Clause 20.3 of ITB.
- 20.5 Evaluation of the technical bids with respect to bid security, qualification information and other information furnished in Part I of the bid in pursuant to Clause 12.3 of ITB, shall be taken up and completed and a list will be drawn up of the responsive bids whose financial bids are eligible for consideration.
- 20.6 The JREDA shall inform, by email, the bidders, whose technical bids are found responsive, date, time and place of opening as stated in the Notice Inviting Bid. In the event of the specified date being declared a holiday for the JREDA, the bids will be opened at the appointed time and location on the next working day through they or their representative, may attend the meeting of opening of financial bids.
- 20.7 At the time of the opening of the 'Financial Bid', the names of the bidders whose bids were found responsive in accordance with clause 20.5 of ITB will be announced. The financial bids of only these bidders will be opened. The remaining bids will be returned unopened to the bidders. The responsive bidders' names, the Bid prices, the total amount of each bid, and such other details as the JREDA may consider appropriate will

- be announced by the JREDA at the time of bid opening. Any Bid price which is not read out and recorded, will not be taken into account in Bid Evaluation
- 20.8 The JREDA shall prepare the minutes of the opening of the Financial Bids.
- 21 Process to be Confidential**
- 21.1 Information relating to the examination, clarification, evaluation, and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any attempt by a Bidder to influence the JREDA's processing of bids or award decisions may result in the rejection of his Bid
- 22 Clarification of Bids and Contacting the JREDA**
- 22.1 No Bidder shall contact the JREDA on any matter relating to its bid from the time of the bid opening to the time the contract is awarded.
- 22.2 Any attempt by the bidder to influence the JREDA's bid evaluation, by any means, bid evaluation, bid comparison or contract award decision may result in the rejection of his bid.
- 23 Examination of Bids and Determination of Responsiveness**
- 23.1 During the detailed evaluation of "Technical Bids", the JREDA will determine whether each Bid (a) meets the eligibility criteria defined in Clauses 3 and 4; (b) has been properly signed; (c) is accompanied by the required securities; and (d) is substantially responsive to the requirements of the bidding documents. During the detailed evaluation of the "Financial Bids", the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e., priced bill of quantities, technical specifications and drawings.
- 23.2 A substantially responsive "Financial Bid" is one, which conforms to all the terms, conditions, and specifications of the bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the bidding documents, the JREDA's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.
- 23.3 If a "Financial Bid" is not substantially responsive, it will be rejected by the JREDA, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.
- 24 Corrections of Errors**
- 24.1 Bids determined to be substantially responsive, will be checked by the JREDA for any arithmetic errors. Errors will be corrected by the JREDA as follows:
- a) where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
- b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
- 24.2 The amount stated in the Bid will be adjusted by the JREDA in accordance with the above procedure for the correction of errors and shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, the Bid will be rejected, and the Earnest money shall be forfeited in accordance with Clause 16.6(b) of ITB.
- 25 Evaluation and Comparison of Bids**
- 25.1 The JREDA will evaluate and compare only the bids determined to be substantially responsive in accordance with Clause 23 of ITB.
- 25.2 In evaluating the bids, the JREDA will determine for each Bid the evaluated Bid price by adjusting the Bid price by making correction, if any, for errors pursuant to Clause 24 of ITB.
- 25.3 If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract, the JREDA may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the JREDA may require that the amount of the performance security set forth in Clause 32 of ITB be increased at the expense of the successful Bidder to a level sufficient to protect the JREDA against financial loss in the event of default of the successful Bidder under the Contract. The amount of the increased performance security shall be decided at the sole discretion of the Employer, which shall be final, binding and conclusive on the bidder.
- 25.4 After its evaluation, the JREDA may require that the amount of the performance security set forth in Clause 30 be increased at the expense of the successful Bidder to a

level sufficient to protect the JREDA against financial loss in the event of default of the successful Bidder under the Contract. The amount of the increased performance security shall be decided at the sole discretion of the JREDA, which shall be final, binding and conclusive on the bidder.

26 Price Preference

26.1 There will be no price preference to any bidder.

F. Award of Contract

27 Award Criteria

27.1 Subject to Clause 29 of ITB, the JREDA will award the Contract to the Bidder whose Bid has been determined:

- i. to be substantially responsive to the bidding documents and who has offered the lowest evaluated Bid price, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of Clause 3 of ITB, and (b) qualified in accordance with the provisions of Clause 4 of ITB; and as per clause 14 of Notice Inviting Bid (Section-3).

28 JREDA's Right to accept any Bid and to reject any or all Bids

28.1 Notwithstanding Clause 27 above, the JREDA reserves the right to accept or reject any Bid, and to cancel the bidding process and reject all bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the JREDA's action without any reason.

29 Notification of Award and Signing of Agreement

29.1 The bidder whose Bid has been accepted will be notified of the award by the JREDA prior to expiration of the Bid validity period by email confirmed by registered letter. This letter (hereinafter and in the Part I - General Conditions of Contract called the "Letter of Acceptance") will state the sum that the JREDA will pay to the Contractor in consideration of the execution and completion of the Works (hereinafter and in the Contract called the "Contract Price").

29.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 30.

29.3 The Agreement will incorporate all agreements between the JREDA and the successful Bidder. It will be signed by the JREDA and the successful Bidder after the performance security is furnished.

29.4 Upon the furnishing by the successful Bidder of the Performance Security, the JREDA will promptly notify the other Bidders that their Bids have been unsuccessful.

30 Security Deposit:

30.1 Successful General bidder shall submit a security deposit @10% of the allotted work order value in the form of Bank Guarantee valid for one year on or before 15 days from issuing work order. If Bank Guarantee will not be submitted within stipulated period from the date of issue of work order then JREDA shall cancel the work order.

30.2 Successful MSME bidders shall be required to deposit only 10% of security deposit as per Jharkhand Procurement Policy.

30.3 The Security Deposit shall be refunded / released to the bidder after expiry of 60 days from the actual date of successful completion.

31. Performance Guarantee:

31.1 Successful General bidder shall submit a performance guarantee @5% of the allotted work order value in the form of Bank Guarantee valid for five years on or before release of any payment.

31.2 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.

31.3 The Performance Guarantee will have to be maintained by the bidder with JREDA till the completion of warranty period.

31.4 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.

- 31.5 Non submission of Security Deposit/Performance Guarantee within the time frame, shall lead to forfeiture of EMD and cancellation of LOI/LOA.
- 31.6 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.
- 32 Five Years Comprehensive Maintenance Contract (CMC):**
- 32.1 The SPV Power Plant contract price includes the provision of 5 years mandatory Comprehensive Maintenance Contract (CMC). To ensure long term sustainability of the system, the bidder must 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 must also be provided. Failure to do shall invite penalty and action.
- 32.2 The Comprehensive Maintenance Contract shall include servicing & replacement guarantee for parts and components (such as battery, electronics, Inverter, PV modules and other hardware including street lights) running, operation and maintenance of SPV Power Plant and Street Lights for five years from the date of installation. **PV modules shall be warranted for 25 years.** Battery, PCU & LED street lights should be warranted for a minimum life of 5 years. The contractor have to make suitable arrangement for running, operation and maintenance of SPV Power Plant and Street Lights by deputing electrician and other persons required in the plant 24 x 7 so that all the Street lights are functional everyday. The date of CMC maintenance period shall begin on the date of actual commissioning of SPV Power Plant with street lights. It is mandatory for the contractor to carry out CMC regularly and submit report to JREDA monthly. Failure to submit monthly CMC reports timely shall invite penalty and action.
- 33 Preventive/Routine Maintenance:**
- This shall be done by the supplier/contractor at least once in every month and shall include activities such as, cleaning and checking the health of the SPV system, cleaning of module surface, topping up of batteries, tightening of all electrical connections, regular checks to identify any leakage of electricity, changing of tilt angle of module mounting structure, cleaning & greasing of battery terminals and any other activity that may be required for proper functioning of the Solar Photovoltaic Power Plant. The maintenance record should be kept properly and to be submitted at JREDA office time to time. CMC documents should be certified by Beneficiary.
- 34 Breakdown / corrective Maintenance:**
- Whenever a complaint is lodged by the user the bidder shall attend the same immediately. It is clarified that effective CMC means that the bidder should ensure 24 hours smooth working of all the solar street lighting throughout the CMC period and therefore, if any complaint in this level of service is found by the JREDA officials and if the bidder do not attempt the rectification of any such defect within three days of communication of such complaint to the bidders, the bidder will be liable for a penalty of Rs. 100 per day beyond three days of reporting of such complaint.
- 35 Advances**
- 35.1 The JREDA will not provide Mobilization Advance and Advance against the security of equipment as provided in Part I - General Conditions of Contract.
- 36 Corrupt or Fraudulent Practices**
- The JREDA requires the bidders/Contractors to strictly observe the laws against fraud and corruption in force in India, namely, Prevention of Corruption Act, 1988.

Section-5

General Terms & Conditions

NIB No: 11/JREDA/SPV/SPP/17-18

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 includes **Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand** complete set in all respects along with one set of operational instruction cum maintenance manual (both English and Hindi) for each set and delivery on FOR destination/site (door delivery) basis across the State of Jharkhand as per the direction of JREDA. The list of destinations/consignees will be given to the successful bidder by JREDA before the start of dispatch.

3.0 Bid documents:

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

4.0 Price:

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

5.0 Inspection of the factory and Tests:

JREDA reserves the right to inspect manufacturer's works/factory to ascertain the capability/availability of necessary equipment and infrastructure required for

manufacture of the items offered. JREDA shall have the access and right to inspect the work or any part thereof at any stage and to test the goods to confirm their conformity to the technical specifications. Successful bidder shall inform JREDA at least 15 days in advance of schedule dispatch for technical sample audit.

6.0 Payment terms and conditions:

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

- (a) **60%** of the Contract Price shall be paid against supply and delivery of goods in full and in good condition as certified by Consignee & JREDA Officials after submission of following documents:
 - i. Original Commercial invoice raised from the state of Jharkhand for the supply made in triplicate (1+2).
 - ii. Copy of duly raised delivery challan / transportation challan /lorry receipt.
 - iii. Duly filled **Annexure-12** should be submitted in three sets (one for Consignee record, one for JREDA Hq. and one for JREDA's field Executive Engineer) with details of materials supplied.
 - iv. Photographs of all the equipment (materials) at destination with signature & seal of Consignee & JREDA Officials. This record should be kept in the office of Consignee for verification.
- (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-12**.
 - iii) Certificate for minimum seven days of satisfactory performance with generation data & functioning of street lights, photographs of the SPV Power Plant and LED Street Lights with GPS Co-ordinates in Soft copy(CD).
- (c) Rest **10%** of the Contract Price shall be paid @ **0.5%** of the Contract Price on completion of every quarter of year for 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 monthly reports of CMC undertaken by the manufacturer **as per Annexure-13**.

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

7.0 Dispatch Instructions:

All items/equipments shall be subject to **Pre-Dispatch Inspection (PDI)** by JREDA or its authorized representatives at the manufacturing site before their dispatch. The manufacturing site must have sufficient testing facilities. The manufacturer will submit **test report** with regard conformity to technical specifications and details of materials in prescribed format for the items to be dispatched to work site of JREDA. However, equipments will be dispatched from the manufacturing site 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. No PDI shall be done at any site other than the concerned manufacturing site. Successful bidders have to arrange necessary equipments for testing the materials to be supplied during the pre-dispatch inspection by JREDA at their manufacturers unit. Failure to fulfill the PDI conditions shall lead to cancellation of work order and forfeiture of security deposit.

After finalization of the tender JREDA authority will first empanel bidders and take decision for issuing work order for the work under scope to the successful bidder supply/ installation will be communicated. Then within 1 months period the supplier will have to ensure pre dispatch inspection from JREDA and within next 15 days JREDA will issue Dispatch instruction. Accordingly the work of supply & installation will be completed by the vendor within 75 days period from the date of issue of dispatch instruction.

8.0 Liquidated Damages for Delay in Completion & CMC:

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. The same will be applicable if monthly CMC report will not be submitted within a week of due date.

9.0 Risk & Cost:

If the contractor fails to complete the awarded work 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. **The supplier shall also arrange for insurance of materials & equipments up to CMC period.** In case of any theft or damage of equipment during CMC period the same will be responsibility of supplier to get it rectify at their own cost.

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 / GST:

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

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

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

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.

Section-6
Technical Specification
NIB No: 11/JREDA/SPV/SPP/17-18

Technical Specifications for Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.

1.0 General Description & Configuration:

It is proposed to install 150 nos. of LED Street Lights at Chandankiyari Chowk, Bokaro of Jharkhand.

To energise these lights, SPV Power Plants of 30 kWp would be installed on the way.

Scope of work:

1. Site survey and layout planning.
2. Design, development and supply of all components (including LED Street Lights with Poles) of the SPV Power Plants.
3. Transportation of SPV Power system hardware up to site.
4. Civil works (including construction of control rooms wherever required) and related electrical and other works.
5. Installation and commissioning of SPV Power system (including LED Street Lights with poles).
6. Operation & maintenance of the system for a period of 5 years from the date of installation.
7. Training to JREDA/Local staff for up-keep and routine maintenance.
8. Any other job essential for smooth completion of the project, not mentioned in "Jobs in the scope of JREDA" below.

Jobs in the Scope of JREDA

- i. Arranging a shadow-free area for SPV array installation & control rooms.
- ii. Providing statutory clearance of any type, wherever required.

Technical description

The Street light luminaries should be suitable for outdoor application. The enclosure of luminaire should be weather proof, should house LEDs and control circuit. The unit should be controlled manually by people deployed at each power plant. These luminaries should be mounted on Galvanized Iron (GI) poles of 65 NB of height of 6 meters from ground level and should be installed either at the middle of the parallel roads or at the footpath on the roadside as per JREDA requirement. Concrete Grouting of poles should be as per standard norms.

The street lights should be installed at approximate spacing of 18 Mtrs. The power to these lights should be fed from a centralized power plant, which will be situated at respective sites mentioned above.

150 Nos. of luminaries will be powered by a 30 kWp centralized SPV power plant at Chandankiyari Chowk, Bokaro.

The Power from the Power plant should be fed to the street light luminaries using underground cable arrangements.

30 kWp Power Plant suitable to operate the above mentioned loads should have the following sub-systems:

S. No.	Description	Specifications
1	Solar Photovoltaic Array	30 kWp
2	Battery Bank	240V, 1200 AH Lead Acid Type AGM-VRLA or Tubular Gel
3	Power Conditioning unit including MPPT,	240VD.C.;30kWp/230/415 Volts A.C.;

	Charge Controller, Inverter and Data Acquisition System	30 KVA
4	Street Light Luminaries with Poles and Hardware	150 Nos. of LED Luminaries (50W) mounted on 150 Nos. of Poles
5	Control room	About 100 sq. ft.
6	Fencing all around PV Array	7 feet high 10 inch thick brick wall with proper entry gate.
7	Underground cabling for street lights	As per the load requirement.
8	Other components such as: Structures Cables, Junction Boxes Lightening arrestors, Earthing etc.	As per the site requirement For 30 kWp Power Plant

Detailed Specifications of components:

PV Modules

- Indigenously manufactured PV modules with mono/multi crystalline silicon solar cells.
- Suitable nos. of minimum 250 Wp capacity PV modules.
- Modules are required to 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.
- Certificate for module qualification from IEC or equivalent to be submitted as part of the offer.
- The efficiency of the PV modules should be minimum 14% and fill factor should be more than 70%.
(I-V curve of the PV modules should be submitted)
- The terminal box on the module should have a provision for "Opening" for replacing the cable, if required.
- Each PV module must have a strip laminated inside the module with following information
 - a) Name of the Manufacturer or distinctive Logo.
 - b) Model or Type No.
 - c) Serial No.
 - d) Year of make.
 - e) Origin of the country.

Mounting Structure

- The modules support structure should be mild steel, hot dipped galvanized (Min. 80 microns) for holding the PV modules. The size of angle iron should not be less than 50x 50 x5 mm.
- Each panel frame structure should be so fabricated as to be grouted on ground or roof on its legs. It should withstand severe cyclone/storm with the speed of 150 Km/Hr.
- Each panel frame structure should 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 should be complete with a weatherproof junction box as per the relevant BIS specifications, where the module terminals should 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 should be so designed that it will occupy minimum space without sacrificing the output from the SPV panels.

Cabling & Junction Boxes

Modules of a panel should be mounted on a structure and connected together in series in the daisy chain manner. The two ends of the modules series should be brought to the panel junction box (PJB) mounted on the panel structure. Series blocking diode should be located in the panel junction box and the panel output should be taken to field junction box (FJB) where outputs of all the panels should be brought for paralleling.

In the control room a DC Distribution Board (DCDB) should be provided where the cables coming from the FJB should be terminated and taken to the PCU. The Batteries, PCU, DCDB and ACDB etc. should be placed inside a weather-proof location.

Power Conditioning Unit

The Power Conditioning Unit (PCU) mainly comprises MPPT, Solar Charge Controller and a three phase bi-directional inverter.

The MPPT Charger should be designed to provide the necessary DC/DC conversion to maximize the power from the 30 kWp SPV array to charge the 240V, 2500 AH battery bank. The charge controller should be equipped with necessary software that allows precise charging of the batteries bank. Many protection features should be included to ensure that no abnormal or out of range charge conditions are encountered by the battery bank. The system should incorporate a front panel display with LEDs and a switch to indicate the "operational status" and "fault status" of the system, reset system faults and implement various operating modes.

The microprocessor controlled inverter should incorporate Pulse Width Modulation (PWM) technology and should incorporate all the desired safety features.

Important features/protections required in the PCU:

- MPPT
- Array ground fault detection.
- Automatic fault conditions reset for all parameters like voltage, frequency and/or black out.
- MOV type surge arrestors on AC & DC terminals for over voltage protection from lightening induced surges.
- PCU operation from 5^o to 55^o C.
- All parameters should be accessible through an industry standard communication link.
- Over load capacity (for 30 sec.) should be 150% of continuous rating.

Operating Parameters	Specifications
Output Voltage	230/415Volts \pm 1% three phase, 4 wire output. Nominal voltage could be adjusted \pm 5% via system set points.
Output Frequency	50Hz \pm 0.5% during standalone inverter operation. Inverter to follow generator frequency up to \pm 3 Hz of the nominal output frequency during parallel operation.
Continuous Rating	300 KVA
Surge Rating	Up to 150% of the continuous rating for a minimum of 30 seconds.
Waveform	Sine wave output
THD	Less than 4%
Efficiency	At 25% load > 85% At 50% load > 90% At 75 % load and above > 92%
Internal Protection System	<ul style="list-style-type: none"> • Inverter continuous overload • Short circuit protection • Over/under AC voltage protection • Over/under frequency protection • Over/under battery voltage protection
Alarm Signals	Via system fault relay (potential free contact)
Front Panel Display	<ul style="list-style-type: none"> • Instantaneous per phase Power, voltage, pf, and frequency • Battery voltage, current, • Solar charge current and ambient temperature • Solar radiation • Accumulated output KWHrs.
Front Panel Metering	<ul style="list-style-type: none"> • Battery Volt Meter • Battery Amp Meter • Solar Amp Meter
Front Panel Controls	<ul style="list-style-type: none"> • Emergency Stop Button • Grid Auto Manual Bypass Switch
Front Panel Indicators	<ul style="list-style-type: none"> • Inverter On Line and Grid On Line • Control Power Supply OK

	<ul style="list-style-type: none"> • System Fault
Circuit Breakers	<ul style="list-style-type: none"> • Grid Input • Battery Input • Solar Input (with shunt trip)
Earthing Provisions	AC bypassing to earth on inverter and DC inputs

DATA Logging	
Operating Parameters	Specifications
Computer Ports	RS232 referenced to ground (non-isolated).
System Features	<ul style="list-style-type: none"> • Adjustable logging period from 60 second averages to 24 hours daily logs • Storage capacity of up to 6 days at 60 minute logs • Time and date stamped log entries • Time and date annotated fault log, holding the fault description and operating statistics • View and change system set point configurations remotely • Bulk log download for immediate data importation into a spreadsheet
Logging Attributes	<p>System summations</p> <ul style="list-style-type: none"> • Site kWh • Inverter input & output kWh • Grid/Gen set kWh • Battery input & output kWh • Solar kWh <p>System Parameters</p> <ul style="list-style-type: none"> • Grid/Gen set kW, voltage, pf, frequency • Inverter kW, voltage, pf, frequency • Battery current • Battery voltage • Ambient temperature • Solar charge current • Solar radiation
Environmental	
Operating Temperature Range	5-50 degrees Celsius
Humidity	0-90% non-condensing
Enclosure	IP30

Battery Bank

A 240V, 2500 AH (at C/10 rate) Battery Bank should be used in the system for storing the generated energy. The battery bank in the offered SPV systems should be maintenance free type for SPV application Lead Acid type AGM-VRLA or tubular Gel.

--The batteries should be suitable for recharging by means of solar modules via solar charge regulators.

-- The self-discharge of battery should be as per BIS specs.

-- The Amp Hr. charge efficiency should be more than 90%

Street Lights

The LED Street lights should be weatherproof, suitable for outdoor application. The enclosure will house **50 Watt LED lamp** which should be operational from dusk-to-down (with manual override) every day. These Luminaries should be mounted on Galvanized poles for protection against weather at a height of 6 meters.

The street lights should be installed at an approximate spacing of 18 meters each. The power to these lights should be fed from 30 kWp centralized power plant. Total 150 Nos. of Street lights are connected with 30 kWp Solar Power Plant. During initial 6 Hrs. lights will operate at full glow and afterward at 50% glow. The power from the Power Plant should be distributed through underground PVC insulated Aluminum Armored cable.

Technical specifications

(i) LED Street Light:

- Power Consumption: 50W
- Input Voltage: AC140-264V
- Lumen Output: 4200 lm
- Colour Temp: 6500K
- Operating Temp: -20°C to 50°C
- No of LED's: 48
- Power Output: 42W
- Power Factor: >0.90
- Lamp Efficiency > 85%
- Life Span: Typically >50,000 hrs
- Viewing Angle: 120°
- Protection: IP-65

(ii) Octagonal shaped G.I. poles conforming to BIS mounted on a plinth at a height of 6 mtr from ground level having inbuilt provision of junction box:

Spare parts

Bidder should keep stock of essential spares (Control cards, PCB's, Switches fuses etc.) at their nearest service center and/or at each site at their cost for 5 years maintenance. A recommended list of such spares should be provided with the offer.

Installation and commissioning

- Detailed project execution plan should be submitted along with the offer.
 - The bidder should quote for installation and commissioning.
 - The bidder is responsible for arranging all the accessories and measuring instruments required to properly commission the system.
- (iii) **Junction box should be inside the poles with locking arrangement having suitable connector and MCB as per the requirement.**
- (iv) **Cable conforming to BIS shall be used size of the cable will be in 4 core 25 Sq mm PVC sheathed SLPE M armoured cable for interconnectivity the poles. Fittings will be connected by 2 x 1.5 Sq. mm MS copper wire from the MCB in the Junction box. If necessary, feeder panel shall be provided for covering the line of longer distance. The bidders have to submit the layout of the plant and street lights for approved to JREDA.**
- (v) **Each component of solar power plant including solar pv module, battery, PCU & luminaires must have distinctive logo of JREDA embossed/sticked.**

Annexure-1

Format for Covering Letter

NIB No: 11/JREDA/SPV/SPP/17-18

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

To,

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

Sub: Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.

Sir,

We are hereby submitting our offer in full compliance with the terms and condition of the above NIB No. We have submitted the requisite amount of Tender Fee in the form of Demand Draft & "Earnest Money" in the form of Bank Guarantee, valid for twelve months.

The tender is uploaded on www.jharkhandtenders.gov.in as per the requirement of the website separately Technical Bid & Financial Bid.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Information About The Bidding Firm**NIB No: 11/JREDA/SPV/SPP/17-18**

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

SL. No.	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-6)	
8.	Nature of Firm (Proprietorship/Partnership /Pvt. Ltd./Public Ltd. Co./Public Sector)	
9.	Permanent Account Number (PAN)/TIN (Attach proof)	
10.	Firm's Registration Number (Attach proof)	
11.	Sales Tax/Value Added Tax Registration Number (Attach proof)	
12.	Specify the Item Originally Manufactured (SPV module/Electronics/Battery) (Attach copy of Registration Certificate of Industry Department)	
13.	Details of in-house testing facility (Attach Proof)	
14.	Office/ Dealer and Service network in Jharkhand with TIN No.(Give details)	
15.	Quoted quantity	
16.	Particulars of Earnest Money	
17.	Place where Materials will be Manufactured	
18.	Place where Materials will be Available for Inspection	
19.	Other details and remarks, if any	

Yours faithfully,

(Signature of Authorized Signatory)

Name :
 Designation :
 Company seal :

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

Declaration by the Bidder

NIB No: 11/JREDA/SPV/SPP/17-18

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

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

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

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Format For Financial Requirement – Annual Turnover

NIB No: 11/JREDA/SPV/SPP/17-18

[On the letterhead of Bidding Company]

To,

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

Dear Sir,

Sub: Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.

We certify that the Bidding Company had an average Annual Turnover of Rs. -----
----- based on audited annual accounts of the last three years ending 31.03.2017
for SPV system.

Authorised Signatory
(Power of Attorney holder)

Statutory Auditor
(Stamp & Signature)

Date:

Format For Financial Requirement - Net Worth Certificate

NIB No: 11/JREDA/SPV/SPP/17-18

[On the letterhead of Bidding Company]

To,

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

Dear Sir,

Sub: Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.

This is to certify that Net worth of _____ {insert the name of Bidding Company}, as on 31st March 2017 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 2017	

Authorised Signatory
(Power of Attorney holder)

Statutory Auditor
(Stamp & Signature)

Format of Power of Attorney for Signing Bid

NIB No: 11/JREDA/SPV/SPP/17-18

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 **NIB No. 11/JREDA/SPV/SPP/17-18**, 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

_____Signature

Accepted by

..... (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.

Details of Orders Received and Executed in Last 7 Years

NIB No: 11/JREDA/SPV/SPP/17-18

Details of Orders Received & Executed by the Manufacturer/Supplier for Supply of **SPV Power Plant** to SNA/ Govt. Organization during Last Seven Years.

SL. No.	Name of Agency/ Organization	Purchase Order No., Date & Ordered Qty.	Capacity of SPV Power Plant	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 Work Orders
- (b) Attach Photocopies of Certificate of Satisfactory Performance Issued by Concerned Nodal Agency/PSU/ Govt. Organization
- (c) Separate sheet may be used for giving detailed information in seriatim duly signed. This bid Performa must be submitted duly signed in case separate sheet is submitted

Format for Technical Details**NIB No: 11/JREDA/SPV/SPP/17-18**

Sub: Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.

S. N	Particulars	Details	Make
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 and Origin		
16	Make of Battery and Origin		
17	Type of Battery		
18	No. of Battery		
19	Each Battery Voltage		
20	Each Battery Ah		
21	Battery Bank rating (Voltage & Ah)		

Undertaking

- We agree to manufacture and supply quality Solar Power Plant as per NIT specifications.
- We agree to give performance guarantee as specified and to abide by the scope of the guarantee as prescribed under the tender document.
- 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 Authorized Signatory with Name Designation & Company Seal)

Filling Instructions:

- The SPP components will be generally guaranteed as per General Terms & Conditions. The manufacturer can also provide additional information about the system and conditions of Guarantee as necessary. The Guarantee card to be supplied with the system must contain the details of the system supplied as per format given above.
- 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.

Technical Detail Form**NIB No: 11/JREDA/SPV/SPP/17-18**

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

Warrantee Card

1.	Name & Address of the Manufacturer/ Supplier of the System	
2.	Name & Address of the Purchasing Agency	
3.	Date of Supply of the System	
4.	Details of PV Module(s) Supplied in the System	
	(a) Name of the Manufacturer	
	(b) Make	
	(c) Model	
	(d) Serial No.	
	(e) Wattage of the PV Module(s) under STC	
	(f) Guarantee Valid Up To	
5.	Details of Battery	
	(a) Name of the Manufacturer	
	(b) Make	
	(c) Model	
	(d) Batch/Serial No(s).	
	(e) Month & Year of Manufacture	
	(f) Rated V & AH Capacity at C/20 or C/10 Rated at 27°C	
	(g) Guarantee Valid Up To	
6.	Details of PCU & 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:

- The Rooftop SPV Power Plants components will be generally guaranteed as per General Terms & Conditions. The manufacturer can also provide additional information about the system and conditions of Guarantee as necessary. The Guarantee card to be supplied with the system must contain the details of the system supplied as per format given above.
- 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.

Price Bid

NIB No: 11/JREDA/SPV/SPP/17-18

Sub: Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.

S. N	Description	Quoted Price (In Rs.)	
		In Figure	In words
1	Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.		

- 1 Above quoted price for **30 kWp Solar Power Plant and 150 LED Street Lights** 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 in Jharkhand and inclusive of installation, testing, commissioning, operation & maintenance for five years, performance testing and training.
- 2 Certified that rates quoted for **30 kWp Solar Power Plant and 150 LED Street Lights** are as per specifications, terms & conditions mentioned in the bid document.
- 3 Price should be quoted in complete numeric figure and words.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Format for Submitting Bank Guarantee for Earnest Money

NIB No: 11/JREDA/SPV/SPP/17-18

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

To,

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

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

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

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

1. We (Bank) hereby agree and undertake to pay you on demand the said amount of Rs. (Rupees only) without any protest or demur in the event the Supplier/Tenderer after submission of his tender, resiles from or withdraws his offer or modifies the terms and conditions thereof in a manner not acceptable to you or expresses his unwillingness to accept the order placed and/or letter of intent issued on the Supplier/Tenderer for the work under "Notice Inviting Bid Ref. No.:" **11/JREDA/SPV/SPP/17-18**.
2. Your decision as to whether the Supplier/Tenderer has resiled from or has withdrawn his offer or has modified the terms and conditions thereof in a manner not acceptable to you or has expressed his unwillingness to accept the order placed and/or Letter of Intent issued by you on the Supplier/Tenderer for the work under "Notice Inviting Bid Ref. No. : **11/JREDA/SPV/SPP/17-18** in this regard, shall be final and binding on us and we shall not be entitled to question the same.

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

Signed and Delivered

For and on behalf of Bank.
(Banker's Name)

Name of Bank Manager:

Address

.....

Certificate of Delivery of SPV Power Plant received by the Consignee as Proof of Compliance by the Supplier

NIB No: 11/JREDA/SPV/SPP/17-18

Certificate

Name of Consignee:....., Designation:-.....

Name of Department:.....

Address of Department:.....

.....

Certified that we have received following materials for installation of Rooftop SPV Power Plants under JNNSM:

1. Nos. & Capacity of SPV Modules:-----
2. Nos. & Capacity of Batteries:.....
3. Nos. & Capacity of PCUs:.....
4. Balance of Systems:.....

Above materials have been supplied by M/s.....

Signature of Consignee along with Seal:.....

Date.....

Certificate of JREDA Representative

Certified that above mentioned materials have been inspected as per the specification and above materials handed over to the Consignee.

Signature & Seal of Supplier

Signature & Seal of JREDA Representative

Format for Monthly O&M and CMC Report

NIB No: 11/JREDA/SPV/SPP/17-18

To,

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

Dear Sir,

Sub: Design, Manufacture, Testing, Supply, Installation & Commissioning and Operation of 30 kWp SPV Power Plant and 150 Nos. of LED Street Lights (50W) including five years Comprehensive Maintenance Contract on Turnkey basis at Chandankiyari Chowk, Bokaro, Jharkhand.

Date of Installation.....

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

Place of Supply.....

Period of inspection: from.....to.....

Generation of solar power during the quarter:.....

Total general till end of the quarter:.....

S. N.	Place of Installed System	System Details		Date of Site Visit	CMC activities undertaken by Technician	Name and Signature of Concerned field Officer of JREDA
		Module No.				
		Battery No.				
		PCU /Inverter No.				
		Unit Generated				

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

**Name and Signature
 (Engineer-in-Charge),
 JREDA**

Contact Person for the NIB**NIB No: 11/JREDA/SPV/SPP/17-18**

[On the letterhead of Bidding Company]

1	Contact Person name for the NIB	
2	Designation	
3	Contact No. (phone & mobile)	
4	Fax No.	
5	e-mail ID	
6	Corresponding address with pin code	
7	Remarks	

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Check List of Technical bid**NIB No: 11/JREDA/SPV/SPP/17-18**

S. No.	Particulars	Yes / No	Page No.
1	D. D. towards Tender fee.		
2	Duly pledged EMD		
3	CST/VAT certificate.		
4	PAN Card		
5	Firm's registration certificate/ Registration certificate of MSME of Jharkhand.		
6	Certificate issued by Industry Dept. or MNRE for system manufacturing.		
7	Bid Capacity		
8	Audited Balance sheet of last three years.		
9	IEC/IS certificate of Solar PV module.		
10	Test certificate of Battery.		
11	IEC/IS certificate of Electronics & test certificate of PCU.		
12	Covering letter (Annexure-1)		
13	Information about the bidding firm (Annexure-2)		
14	Declaration by the bidder (Annexure-3)		
15	Annual Turn over (Annexure-4)		
16	Net Worth certificate (Annexure-5)		
17	Format for power of attorney for signing of bid (Annexure-6)		
18	Proof of supply/execution of SPV Items/systems in any SNA/Govt. organization/PSU in the last seven years. Attach copy of orders & its satisfactory completion certificate (Annexure-7)		
19	Technical details & make of the Equipments to be supplied (Annexure-8)		
20	Information on Bid Capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid(Annexure-14)		
21	Contact Person for the NIB (Annexure-15)		

*** Please write page 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: