Bid Specifications
for

Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40W White LED based Solar Street Lighting Systems (SSLs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).

(JREDA)

Government of Jharkhand

Tender Reference No.: 06/JREDA/SPV/SSLS(LED)/25-26

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.: 06/JREDA/SPV/SSLS(LED)/25-26 **Dated: 09.04.2025**

Online bids are invited for "Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40W White LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA). The details are as follows:

1	Name of the work	Rate Contract for the work of Supply, Installation, Testing and Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40W White LED based Solar Street Lighting Systems (SSLS) with Lithium Ferro Phosphate Battery including Remote Monitoring Systems (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA)
2	Period of contract	**05(Five) Years**
3	Time of completion	**04 (Four) Months**
4	Date of publication of NIT on website:http:// jharkhandtenders.gov.in	**21.04.2025 (Monday)**
5	Date & time of Pre-bid meeting	**28.04.2025 (Monday)** at 1:00 P.M.
6	Last date & time for receipt of online bids	**14.05.2025 (Wednesday)** upto 05:00 PM
7	Submission of original copies of Bid fee &EMD through Online via SBI Payment Gateway of Jharkhand Tenders	**14.05.2025 (Wednesday)** upto 05:00 PM
8	Technical Bid Opening Date	**16.05.2025 (Friday)** at 3.00 P.M.
9	Name & address of office inviting tender	Director, Jharkhand Renewable Energy Development Agency(JREDA) 3rd Floor, SLDC Building, Kusai, Doranda, Ranchi- 834002 (Jharkhand)
10	Contact no. of procurement officer	0651-2491163/61/7004806449
11	Helpline no. of e-procurement	0651-2491163/61

Any corrigendum/addendum 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

Sd/

Director,
JREDA, Ranchi

Section -1

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

List of Important dates & details of Bids

1.	Name of work	Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40W White LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).
2	Tender reference no.	**06/JREDA/SPV/SSLS(LED)/25-26**
3	Period of contract	**12 (Twelve) Month**
4	Completion period	**04 (Four) Month**
5	Mode of submission of tender	**Online through www.jharkhandtenders.gov.in**
6	Tentative Quantity	**Total Quantity: 6000 Nos.** • Estimated cost of the project will be used primarily for installation of 20W SSLs. However, other categories of SSLs will be installed based on demand received and availability of fund from various government departments) • The quantity mentioned above is tentative and subject to increase or decrease depending on the actual requirement at the time of placing order and resources available.
7	Maximum/Minimum lot size	Maximum: **2000 No's.** Minimum: **500 Nos.** **No bidder shall submit bid for quantity less than minimum lot size & more than maximum lot size.**
8	Tender Fees (non-refundable); through Online Via SBI Payment Gateway of Jharkhand Tenders.	• For General Bidders: Rs. 11,800/- • MSE of Jharkhand: NIL
9	Earnest Money Deposit (EMD) through Online Via SBI Payment Gateway of Jharkhand Tenders. {This is mandatory}	• For General Bidders: Rs. 2,16,000/- • For MSE of Jharkhand: NIL
10	Date of publication of NIT on website: http:// jharkhandtenders.gov.in	**21.04.2025 (Monday)**
11	Date & time of Pre-bid Meeting	**28.04.2025 (Monday)** at 1:00 P.M.
12	Period of downloading of bidding documents	**28.04.2025 (Monday)** at 1:00 P.M.
13	Last date & time for receipt of online bids	**14.05.2025 (Wednesday)** upto 05:00 PM
14	Submission of Bid fee and EMD through Online Via SBI Payment Gateway of Jharkhand Tenders	**14.05.2025 (Wednesday)** upto 05:00 PM
15	Technical bid opening date	**16.05.2025 (Friday)** at 3.00 P.M.
16	Authority inviting bids	Director, Jharkhand Renewable Energy Development Agency (JREDA)

17	Address	Jharkhand Renewable Energy Development Agency (JREDA) 3rd 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: -

- Only electronic receipt of Cost of Tender and Earnest Money Deposit (Bid Security) will be acceptable as per provisions of Standard Operating Procedure (SOP). Issued by Information Technology & e- Governance Department, Government of Jharkhand Vide Order Memo No. 120, Dt. 03.10.23 of Secretary, Information Technology & e-Governance Department, Government of Jharkhand. (Copy Attached)
- The abovementioned dates & details are subject to change, in case of amendments details shall be intimated.

Sd/-
Director,
JREDA, Ranchi

Section -2

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

General Documents Required

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 scanned copies of the cost of documents & Online EMD as specified in the tender document. Before submission of online bids, bidders must ensure that a scanned copy of all the necessary documents has been attached to the bid.
7. Receipts of Online Submission of EMD & Bid Fee specified in the tender documents should be online (scanned copies) otherwise tender summarily will be rejected.
8. Uploaded documents of valid successful bidders will be verified with the original before signing the agreement. The valid successful bidder must provide the originals to the concerned authority. The department will not be responsible for delays in online submission due to any reason.
9. All the required information for the bid must be filled out and submitted online. If the bid is not found to be uploaded online to the website (http://Jharkhandtenders.gov.in), No hard copy is required to be submitted to the office of JREDA.
10. The quoted rates should be in line with the "Jharkhand P.W.D. Code, which is implemented by vide Sankalp letter no. 2146(s) Dated 09/09/2020".
11. Other details can be seen in the bidding document
12. Note: The agency needs to submit the amount of. 11,800/- (Inclusive of GST@ 18%) online mode via SBI payment gateway on https://jharkhandtenders.gov.in. for the participation in the NIB in between all working days from Date: 21.04.2025 to 14.05.2025 up to 05:00 PM.
13. **Submission of Rate/Price bid in any form by the bidder in technical section shall lead to the rejection of the bid.**

1. Details of documents to be furnished for online bidding

I Scanned copies of the following documents to be up-loaded in pdf format on the website http://Jharkhandtenders.gov.in.

i. Online Payments towards Tender fee.

ii. Online payments towards EMD.

iii. Scan Copy of Challan / Receipt of Tender Fee and EMD submission through Online Via SBI Payment gateway of Jharkhand Tender.

iv. PAN Card

v. Latest GST certificate and GST Returns.

vi. Firm's registration certificate company/Pvt. Ltd./ Proprietorship firm/Partnership/corporation/ LLP.

vii. Registration certificate of MSMEs of Jharkhand (Certificate issued by GM DIC Industry Dept. for system/components manufacturing)

viii. In case the bidder wants to avail the benefit of MSEs of Jharkhand then bidder will be submitted:

a) Registration certificate of MSEs of Jharkhand/ UDYAM issued by Industry Dept. duly verified by GM- DIC mentioning whether unit is existing & functional.

b) A registered manufacturing company/firm/corporation in India Including MSME of Jharkhand of least one of the major components namely Modules or Battery or Luminary (Confirming to relevant National/International standards).

c) The bidder shall furnish the relevant certificate of the concerned industry department certificate indicating that they are manufacturers of SPV Modules, Battery, or Luminary along with a test report as per NIB.

ix. 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.

x. List of works for which bids already submitted.

xi. ITR for the assessment year AY 2022-23, 2023-24 & 2024-25.

xii. Financial Statements (i.e., Balance sheet & Statement of Profit or Loss) for the last 3 financial years FY 2021-22, 2022-23 & 2023-24. certified by a Chartered Accountant with UDIN.

xiii. Annual Turnover (FY-2021-22, 2022-23 & 2023-24) certified by Chartered Accountant with UDIN.

xiv. Audited financial Report for the last 3 years (upto 31/3/2024) certified by chartered Accountant.

xv. Net worth certificate certified by Chartered Accountant with UDIN.

xvi. List of current litigant cases in which the bidder is involved.

xvii. An affidavit for non-engagement of related persons.

xviii. Composite Test Certificate for complete system for 20W, 30W and 40W White LED based solar street Lighting system with RMS (Remote Monitoring System) test report issued by MNRE/BIS approved Test Labs.

xix. Only for MSEs: Proof of Manufacturing of Major Components (LED/SPV module/Battery): Valid test report of manufacturing components in the name of MSE bidder with address of manufacturing unit issued by MNRE/BIS/NABL approved test lab.

xx. Authorized address & contact numbers of the bidder as per instruction in the Notice Inviting Bid duly digitally signed.

xxi. Undertaking of Bidder that he is able to invest minimum of cash up to 10% as defined in ITB.

xxii. Undertaking for validity of bid for 180 days.

xxiii. Valid Vendor registration certificate of JREDA.

xxiv. Copy of written power of attorney of the signatory of the Bid for bidding.

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 for Bid fee.

   ii. Annexure-1a: Undertaking by MSME of Jharkhand for Availing Preferential treatment.

   iii. Annexure 2: Check list for technical bid

   iv. Annexure-3: Information about the bidding firm.

   v. Annexure-4: Declaration by the bidder.

   vi. Annexure-5: Annual Turnover Certificate.

   vii. Annexure-6: Net Worth certificate.

   viii. Annexure-7: Format for power of attorney for signing of bid (As applicable).

   ix. Annexure-8: Experience Certificate- Details of orders received and executed in last 5 years.

   x. Annexure-9: Price Bid

   xi. Annexure-10: Contact Person for the NIB, Administration and Execution of the project.

   xii. Annexure-11: Certificate of delivery of LED based Solar Street Lighting Systems Received from The Consignee as Proof of Compliance by the Supplier.

   xiii. Annexure 12: Certificate of Installation of LED based Solar Street Lighting Systems Received from The Consignee as Proof of Compliance by the Supplier.

   xiv. Annexure 13: Format for Quarterly O & M & CMC Report.

   xv. Annexure 14: Warranty card.

   xvi. Annexure-15: certificate of delivery of Solar Street Lighting Systems.

   xvii. Annexure-16: certificate of Installation of Solar Street Lighting Systems.

   xviii. Annexure-17: Declaration of Bidder.

3. 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 though registered post.
4. 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, cannot participate in the tender.

IMPORTANT NOTE TO BIDDERS:

Timely Submission of an offer to JREDA: The bidders must submit their bids online in electronic format with a digital signature along with a Scan Copy of Challan / Receipt of Tender Fee and EMD submission through Online Via SBI Payment gateway of Jharkhand Tender. The bids without digital signatures will not be accepted. No proposal will be accepted in physical/offline form, the offer will not be considered and any further communication in the matter will not be entertained. **Please note that the Bid is not to be submitted in physical form.**
The bid will not be accepted in any case after the due date and time of receipt of the Tender, irrespective of delay due to any reasons, circumstantial or otherwise and JREDA does not assume any responsibility for late receipt of the Tender.

1. All interested parties are requested to understand the Tender in detail to comply with JREDA's requirements including but not limited to the fees and deadlines, selection criteria, selection methodology, scope of work, and minimum technical standards. They shall strictly abide by all terms prescribed in this Tender and provide accurate information to the best of their knowledge without misleading the Company to be considered for participation in this Project.
2. It is mandatory for all the bidders to submit their Technical and Financial bids online only via the e-tendering portal.
3. Technical Bid (techno-commercial Bid): All the bidders must submit their Technical Bid (Techno-commercial Bid) Scanned copy of the documents & Transition receipt of the Tender Fee & EMD through online (e-tendering) at the scheduled time. Technical Bid in hard copy (physical form) shall not be considered.
4. Tender Fee and EMD shall be submitted through Online Via SBI Payment gateway of Jharkhand Tenders.
5. It is mandatory for all bidders to submit their Price-Bid only through online (e-tendering).
6. The Price bid submitted in physical form will not be considered for its opening. Only online submitted price bids will be considered for evaluation.
7. Any technical/commercial query about this Tender should be referred to:

   Director,
   Jharkhand Renewable Energy Development Agency (JREDA)
   3rd Floor, SLDC Building, Kusai Colony Doranda,
   Ranchi-834 002, Jharkhand.
   Ph: 0651- 2491 161
   Email: info@jreda.com Website: www.jreda.com

8. JREDA reserves the right to accept/reject any or all tenders without assigning any reasons thereof. Bidders are requested to be in touch with the above-mentioned website till the opening of the price bid to know the latest status.

B. Details of documents to be furnished for online bidding

Scanned copies of the following documents are to be uploaded in .pdf format on the website

B – Financial Bid – (Finance Cover)

iii) Duly Quoted & digitally signed Bill of Quantity (BOQ) in the file supplied by JREDA in .xls format.
iv) Declaration by Bidder in the format Section – 6 form of Bid in .pdf format.

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

Section-3

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

Sub: **Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40WWhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).**

Preamble:

As part of Solar Photovoltaic Programme, JREDA invites bid for **"Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40W White LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA)."** for short listing of experienced & eligible bidders to whom work shall be allocated for successful execution of the project in a defined time frame. **No bidders shall submit bid for quantity less than minimum lot size and more than maximum lot size**.

(I) General Requirement

1. The bidder should be a registered manufacturing company/Firm/ Corporation in India (including MSMEs of Jharkhand) manufacturing at least one of the three (Module, Battery, Luminary) components of the Solar Street Light System. **Authorized dealers' companies/firms/ corporations and subcontractors are not eligible to participate.**
2. The manufacturing or Service unit is located within the State of Jharkhand.
3. The Head Office or Corporate Office of such registered unit/company/enterprise is within the territorial jurisdiction of Jharkhand.
4. MSE is registered with the Directorate of Industries/District Industries Centre, Khadi and Village Industries Board, Directorate of Handloom, Sericulture and Handicraft of Jharkhand Govt, Industrial Area Development Authorities and National Small Industries Corporation Ltd or any other body specified by Directorate of Industries, Jharkhand Govt from time to time and other industrial units/enterprises which have submitted IBM and been issued Date of Production (DOP) certificate by GM, DIC/MD, Industrial Area Development Authorities/ Director, Industries, GoJ or MSEs having Udyog Aadhar Number issued by Ministry of Micro, Small and Medium Enterprises, GoI to be duly verified, whether unit is existing/functional and doing regular production at what capacity by GM, DIC/MD, Industrial Area Development Authorities/Director, Industries, GoJ".
5. The MSEs /other Enterprises and units must be registered under Jharkhand Goods and Services Tax (JGST) Act-2017 or The Central Goods & Services Tax (CGST) Act 2017.
6. The MSE /other enterprise and unit must have encouraged local people in employment.
7. The MSE /other enterprise and unit must have complied with all statutory and legal formalities of concerned regulators/Act.
8. The MSE Unit availing preferential treatment will give an undertaking with respect to (i) to (vi) above including a categorical statement that the product/services being supplied to Govt. Dept. or its agencies has been manufactured/created by the unit located in Jharkhand only, giving details of batch no./date or any other identifiable tag (GSI etc) as per prevalent established practice and will have to submit compulsorily duly signed copy of Form GSTR-9C (For units having aggregate yearly turnover of more than 2 crores) as prescribed under JGST Act-2017". However, in case of VAT products/services,

Form JVAT-409 (For units having of gross yearly turnover more than 60 lacs) issued by dept. of Commercial taxes, Govt. of Jharkhand.

9. The bidder should be a functional organization. To substantiate this claim, the bidder should submit the copy of Audited accounts for last 3 years along with Income Tax Return (ITR) complete set. These audited accounts should be duly certified by the Statutory Auditor with his stamp.

10. Registered Micro & Small Enterprises (MSMEs) of Jharkhand should submit the attested copy of Registration certificate/ Udyog Aadhar/Udyam issued by the Industry Department, Govt. of Jharkhand duly verified by concerned DIC.

11. The bidder should have valid GST and PAN.

12. Bids from joint venture are not allowed.

13. **Contractor Registration are mandatory to Participate in this tender.**

14. Component Manufacturer are Exempted for this tender. However, Component manufacturer are advice to registered as soon as Possible.

(II) Commercial Requirement

1. **Turnover**

For General Bidder: Average Annual Turnover during last three years should be **30%** of estimated cost of minimum lot size and thereafter in same proportion for higher quantity.

For MSE of Jharkhand: Average Annual Turnover during last three years should be at least **10%** of estimated cost of minimum lot size and thereafter in same proportion for higher quantity.

Require Annual Turnover			
Sr No.	**Category**	**For General Category (in lakh)**	**For MSEs Category (in Lakh)**
1	20W Solar street Light System	35.42	11.80
2	30W Solar street Light System	62.73	20.91
3	40W Solar street Light System	97.50	32.50

The certificate should be issued by **CA with UDIN no**. as per the Performa given at **Annexure-5.**

New-MSME is defined as MSME which have not completed 3 financial years from the date of establishment of Solar PV equipment manufacturing unit such as Module/ Cells/ Batteries / PCUs / Any Other Solar PV electronics.

A :- Unit has not completed 1 Year – Financial Soundness Certificate issued from Bank is required not less than 10% of Project Cost / Quoted Quantity Cost.

B:- Unit has not completed 2 Year – should have annual turnover at least 10% of estimated cost / Quoted Quantity Cost.

C :- Unit has not completed 3 Year - should have Average Annual Turnover of last 2 years equal to 10% of estimated cost / Quoted Quantity Cost.

2. Net worth Requirement:

For General Bidder/ For MSE of Jharkhand/ For New MSEs: Bidder should have Positive Net Worth as on 31.03.2024 on the basis of audited annual accounts.

Net worth certificate should be issued by CA who has performed audit of accounts with UDIN no. as per the Performa given at **Annexure-6**

(III) Technical Requirement:

For General Bidders: Experience of having successfully completed similar works in any SNA / Govt. Organization / PSU during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following: -

a. Three similar completed works costing not less than the amount equal to 40% of the estimated Project cost/ minimum Quoted quantity cost.

Or

b. Two similar completed works costing not less than the amount equal to 50% of the estimated Project cost/ minimum Quoted quantity cost.

or

c. One similar completed work costing not less than the amount equal to 80% of the estimated Project cost/ minimum Quoted quantity.

Note: - Similar works mean Supply, Installation, Commissioning including CMC of Solar Street Lighting system along with Work Completion Certificates from Central Government/ State Government Department/ Agency will be considered as Similar Completed Work.

For MSME of Jharkhand:

One similar completed work costing not less than the amount equal to 10% of the estimated Project cost/ Quoted quantity from PSU/Govt. Organization/ SNA in last seven years.

New-MSME of Jharkhand shall be exempted from the Experience requirement.

The copies of work orders and corresponding performance certificate issued by procuring authorities indicating its successful execution and performance certificate must be enclosed as per the Annexure 8.

1 The bidder must be in possession of valid test report of LED based SSLS (complete system) from any test Centre approved by MNRE/BIS. The latest Composite test certificate should confirm that LED based Solar Street Lighting Systems LED Luminary 20W/30W/40W, Module 100Wp/150Wp/200Wp & Battery 12.8V 40Ah/60Ah/80Ah as per JREDA specifications. The test certificate issued other than section 6 of Technical Specification of this NIB will lead to outright rejection of the BID.

2 Test Report to be Submitted by Bidders.

3 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.

4 There are Three Group mention below.

Group A	Group B	Group C
20 Watt SSLs	30 Watt SSLs	40 Watt SSLs

(IV) Procedure for Award of Work:

- JREDA will award the Contract to the Bidder whose Bid has been found technically and financially successful by JREDA Purchase committee and who has been empaneled under different category.
- The lowest rate, i.e., L1 received from technically qualified bidders would be the appropriate rate for awarding the work in each category.
- JREDA may empaneled more than one vendor in a category/group as per their bid category after matching discovered L1 rate in respective categories of bid.
- If quantity/capacity is left unallocated in any category, JREDA reserves the right to reallocate the left-over quantity to other categories.
- JREDA will allocate initial capacities/quantities to empaneled bidders based on their bid capacities and available capacities. If Bidder is a working agency of JREDA then allocation of capacities/quantities will be done based on the bid capacities and their past performances in JREDA like timely completion of allotted work and timely submission of CMC report and performance certificate marks etc. JREDA will review the progress of each agency on monthly basis and a performance appraisal will be done after completion of three months. On the basis performance appraisal quantities allocated to agencies will be revised.
- Allocation of the quantity to MSMEs registered in Jharkhand will be made as per the provisions of Jharkhand Procurement Policy.
- To encourage the new MSMEs of Jharkhand JREDA may consider for awarding the work on acceptance of L-1 Rate.
- Agency who apply for only one Category, However JREDA reserve the right to may empanel work of one category to other category on subjected to acceptance of L1 Rate.

SECTION-4

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

Table of Clauses

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NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

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 Proof of Manufacturer-

Those bidders who are also manufacturers of an important component of Solar Street Light System such as SPV Modules, Luminary, Battery, Controller or Pole shall have to submit proof of their factory, SSI Registration and list of Machineries and Equipment's.

3 Source of Funds

3.1 The JREDA has decided to undertake the works of **"Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40W White LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA)."** Through funds from the Government of Jharkhand to be implemented through JREDA.

4 Eligible Bidders

4.1 This Invitation for Bids is open to all bidders as defined in the Notice Inviting Bid.

4.2 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.

5 Analysis of Rate-

Above estimated rates have been calculated from our Previous tender i.e. NIB 05/JREDA/SPV/SSls(LED)/24-25 and rates of different items Finalized vide EOI No: - Energy/JREDA/Ranchi/05/22-23 Bidders are advised to Quote rate after detail Market Analysis. In case rate Quoted by the Bidders are found to be abnormally low bid (ALB) as defined in clause no 5.6.3 and 5.6.4, manual for procurement of work department of expenditure ministry of Finance Government of India 2022. Then Procuring Entity i.e. JREDA may seek written clarification from bidders, including details Price Analysis of its BID, Price in relation to Scope, Schedule, Resource Mobilization. Allocation of Risks and responsibility, and other requirement of the bid Documents. If, After Evaluating the Price Analyses, Procuring Entity determines that the Bidders has substantially failed to Demonstrate its Capability to deliver the Contract at the offered Price, the Procuring Entity May Reject the Bid.

6 Qualification of the Bidder

6.1 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.

6.2 . A To qualify for award of the Contract, each bidder should meet the following criteria:

4.4.B (a) Each bidder must produce

i) An affidavit that the information furnished with the bid documents is correct in all respects; and

Such other certificates as defined in the Notice Inviting Bid. Failure to produce the certificates shall make the bid non-responsive.

4.4.C 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 and financial failures.

iii) Participated in the previous bidding for the same work and had quoted unreasonably high or low bid prices and could not submit rational justification for it to JREDA.

7 One Bid per Bidder

7.1 Each Bidder shall submit only one Bid for one work. A Bidder who submits more than one Bid will be disqualified.

8 Cost of Bidding

8.1 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.

9 Site Visit

9.1 Site will be allocated to successful bidders as per the demand received, which may be across the State of Jharkhand. The bidder shall have no claim regarding economy of scale, choice of location in the State of Jharkhand. However, bidder may visit site after allocation of site.

B. BIDDING DOCUMENTS:

10 Content of Bidding Documents

10.1 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.

10.2 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.

11 Clarification on Bid Documents and Pre-bid Meeting:

11.1 A prospective Bidder requiring any clarification of the bid documents may inform to the JREDA in writing at the JREDA's address indicated in the Notice Inviting Tenders. JREDA's response will be uploaded in form of corrigendum on our website www.jreda.com.

11.2 Pre-bid meeting will be held on **28.04.2025** at 1.00 P.M. in the Conference Hall of JREDA. The bidder or his authorized representative may attend the meeting.

11.3 The purpose of such a meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

11.4 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.

11.5 Any modifications of the bid document 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.

12 Amendment of Bidding Documents

12.1 Before the deadline for submission of bids, the JREDA may modify the bidding documents by issuing addenda/corrigendum.

12.2 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

13 Language of Bid

13.1 All documents relating to the Bid shall be in the language specified in the Notice Inviting Bid.

14 Documents Comprising the Bid

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

1) EMD & Tender Fee

Submission of Bid Fee and EMD through Online Via SBI Payment Gateway of Jharkhand Tenders.

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.

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.

1 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

15 Bid Prices

15.1 The Contract shall be for the whole Works, as described in Clause 1.1 of ITB.

15.2 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.

15.3 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 excluding GST submitted by the Bidder.

15.4 The rates and prices quoted by the Bidder shall be fixed for the duration of the Contract and shall not be subject to adjustment.

15.5 Tenderers should quote their rates considering wide variation of site conditions, variation in price of different components during the year 2023-24 and keeping the quantum and quality of work in mind. If JREDA anticipates that rate is abnormally low or high, tender may be cancelled.

15.6 Price bids submitted by New MSMEs shall not be considered. However, to complete the tender process those MSMEs have to submit price bids. They have to accept the L1 rate derived in tender for award of work.

16 Currencies of Bid and payment.

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

17 Bid Validity

17.1 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.

17.2 In exceptional circumstances, prior to expiry of the original time limit, the JREDA may request to the bidders for extension of 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.

18 Earnest Money

18.1 The Bidder shall furnish, as part of the Bid, Earnest Money, in the amount specified in the Notice Inviting Bid.

18.2 Submission of EMD through Online Via SBI Payment Gateway of Jharkhand Tenders.

18.3 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.

18.4 The online submitted Earnest Money of unsuccessful bidders will be returned within 07 days of the end of the Bid validity period specified in Clause 15.1 of ITB.

18.5 The Earnest Money of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the required Security Deposit.

18.6 The Earnest Money may be forfeited:

a) if the Bidder withdraws the Bid after bid opening 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.

19 Alternative Proposals by Bidders

19.1 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

20 Tender fees and EMD Envelope to be Deposited at JREDA

20.1 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: The contents of the Technical and Financial Bids shall be as specified in clause 12.1of ITB. All documents are to be signed digitally by the bidder.

20.2 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 20.2 of ITB.

21 Deadline for Submission of Bids

21.1 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.

21.2 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

22 Bid Opening

22.1 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.

22.2 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.

22.3 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.

22.4 The JREDA will prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Clause 20.3 of ITB.

22.5 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.

22.6 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.

22.7 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

22.8 The JREDA shall prepare the minutes of the opening of the Financial Bids.

22.9 Price part will not be open for MSEs having no work Experience in similar works as defined in NIB.

23 Process to be Confidential

23.1 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 process of bidding or award decisions may result in the rejection of his Bid

24 Clarification of Bids and Contacting the JREDA

24.1 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.

24.2 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.

25 Examination of Bids and Determination of Responsiveness

25.1 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.

25.2 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.

25.3 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.

26 Corrections of Errors

26.1 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.

26.2 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.

27 Evaluation and Comparison of Bids

27.1 The JREDA will evaluate and compare only the bids determined to be substantially responsive in accordance with Clause 23 of ITB.

27.2 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.

27.3 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.

27.4 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.

27.5 Bid Evaluation Criteria.

S.N.	Applied Category by Bidder as per Annex 17	Bid Document	Remarks
1	General	Document found OK for General, MSEs and/or NEW MSEs	Shall be Consider for General category
2	General	Document found OK for MSEs and/or NEW MSEs	Shall not be consider for any category. The Bid shall be rejected
3	MSEs	Document found OK for General, MSEs and/or NEW MSEs	Shall be Consider only for MSEs category
4	MSEs	Document found OK for General or NEW MSEs	Shall not be consider for any category. The Bid shall be rejected
5	NEW MSEs	Document found OK for General & NEW MSEs	Shall be Consider only for NEW MSEs category
6	NEW MSEs	Document found 'OK' for General and MSEs	Shall not be consider for any category. The Bid shall be rejected

28 Price Preference

28.1 There will be no price preference to any bidder; however, any price preference shall be in line with Jharkhand Procurement Policy 2014 for MSE bidders.

F. Award of Contract

29 Award Criteria

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

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

30.1 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.

31 Notification of Award

31.1 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 and 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").

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

31.3 The Agreement will incorporate NIT document, Work order & subsequent amendments between JREDA and the successful Bidder. It will be signed by the JREDA and the successful Bidder after the security deposit is submitted.

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

32 Security Deposit:

32.1 Successful General bidder shall submit a security deposit **@10%** of the allotted work order value (inclusive GST) 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.

32.2 Successful MSME bidders shall be required to deposit **@1%** of the allotted work order value (inclusive GST) in the form of Bank Guarantee valid for one year as per Jharkhand Procurement Policy.

32.3 GST should be applicable with security and PBG.

32.4 BG/TDR/FDR/DD confirmation from bank done through e SFMS portal of bank.

32.5 The Security Deposit shall be refunded / released to the bidder after successful completion of work and submission of performance guarantee.

32.6 The Security Deposit will have to be maintained by the bidder with JREDA till the satisfactory completion of the work. If the work extends beyond the expiry date of Bank Guarantee, bidders shall submit fresh or extend the period of validity of Bank Guarantee as per the direction of JREDA, otherwise JREDA may terminate the work order and blacklist the contractor.

32.7 The Security deposit shall be refunded released to the bidder after the expiry of 60 days from actual date of successful completion of work.

32.8 JREDA shall empanel all the bidders on acceptance of lowest (L1) rate.

33 Performance Guarantee:

33.1 Successful General bidder shall submit a performance guarantee **@5%** of the allotted work order value (inclusive GST) in the form of Bank Guarantee valid for five years on or before release of Payment against Installation.

33.2 Successful MSME bidders shall submit a Performance Guarantee **@0.5%** of the allotted work order value (inclusive GST) in the form of bank guarantee before release of payment against Installation.

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

33.4 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.

33.5 Non submission of Security Deposit/Performance Guarantee within the time frame, shall lead to forfeiture of EMD and cancellation of work order.

33.6 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.

34 Five Years Comprehensive Maintenance Contract (CMC):

34.1 The LED BASED SSLS system contract price includes the provision of 5 years mandatory Comprehensive Maintenance Contract (CMC). To ensure long term sustainability of the system, the bidder 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.

34.2 The Comprehensive Maintenance Contract shall include servicing & replacement guarantee for parts and components (such as battery, electronics, Inverter, PV modules and other hardware) of LED BASED SSLS for five years from the date of installation. **PV modules shall be warranted for 25 years**. Battery should be warranted for a minimum life of 5 years. The date of CMC maintenance period shall begin on the date of actual commissioning of LED BASED SSLS. It is mandatory for the contractor to carry out CMC regularly and submit report to JREDA Monthly along with RMS data. Failure to submit Monthly CMC reports timely shall invite penalty of Rs. 1500/- per week after the end of the Seventh Day of the ending of the Month. If the successful bidder is found to be not doing CMC work continuously for One quarter, then bidders performance guarantee will be forfeited, work order shall be cancelled, and bidder shall be blacklisted. **For carrying out effective and smooth maintenance of the Solar Street Lighting Systems, reasonable number of service centers must be established by the successful bidders before the commissioning of the systems. System Communication should be monitor on regular basis by successfully bidder, Major Fault or Communication failure should be communicated through mail or Written application to JREDA with Estimated time of Communication/ System restore within the day of failure.**

35 Preventive/Routine Maintenance:

This shall be done by the supplier/contractor at least once in every three months and shall include activities such as, cleaning and checking the health of the SPV system, cleaning of module surface, tightening of all electrical connections, regular checks to identify any leakage of

current, 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.

36 Breakdown / corrective Maintenance:

Whenever a complaint is lodged by the user or Fault alert in RMS portal the bidder shall attend the same immediately and inform the same with Corrective action plan to JREDA through mail Communication within a day. It is clarified that effective CMC means that the bidder should ensure 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 (will be Consider Fault alert in RMS Portal of SSLS) of such complaint to the bidders, the bidder will be liable for a penalty of Rs. 1000 per day per system beyond three days of reporting of such complaint.

37 Advances

37.1 The JREDA will not provide any advance against the security of equipment as provided in Part I - General Conditions of Contract.

38 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.

39 Timeline/ Completion Period:

The time of completion shall be adhered as per the timeline defined in the table below:

Sr. No.	Particular	Timeline (in Days)
1	Letter of award	**X Day**
2	Submission of Security Deposit and Signing of Agreement	**Within X+15 Days**
3	PDI Offer	**X+30 Days**
4	Issue of DI (Dispatch Instrcution)	**X+40 Days**
5	Delivery of material on site.	**X+60 Days**
6	Supply, installation & Commissioning of SSLS at Sites	**X+120 Days**

Section-5

General Terms & Conditions

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

1. **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. **Scope of work:**

The Scope of work for **LED based Solar Street Lighting System** includes "**Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40W White LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).**" 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 site basis across as per the direction of JREDA. The list of consignees will be given to the successful bidder by JREDA before the start of dispatch.

3. **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. **Price:**

The bidder shall quote their 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, levies and 5 years CMC etc. Excluding GST 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. **Inspection of the factory and Tests:**

JREDA reserves the right to inspect manufacturer's works/factory to ascertain the capability/availability of Testing 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. Payment terms and conditions:

Project Cost will be divided into Supply, Installation, Commissioning as one part and CMC as second part. Rate of second part will automatically be 20 % of complete Project cost (1st Part+ 2nd Part). In case agency fails to comply CMC as per work order i.e., fails to submit CMC report or fails to attend compliance then after two notice or two months whichever is earlier, 2nd part of work order will be transferred to any of the technically qualified agency under that NIB on quotation basis and the performance bank guarantee of the agency will be forfeited along with necessary action as per prevailing rules. Subject to any deduction which JREDA may be authorized to make under this contract, the contractor shall be entitled to payment as follows:

70% of the 1 st Part of Project cost shall be paid against supply and delivery of goods in full and in good condition as certified by Consignee and/or 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/dispatch clearance.
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).
IV. Photographs of all the equipment (materials) at destination with signature & seal of Consignee/JREDA Officials. This record should be kept in the office of Consignee for verification.
V. Submission of the Insurance Documents and Warranty Certificates of the Components.

30% of the 1 st Part of Project cost 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–13 should be submitted in three sets (one for Consignee record, one for JREDA Hq. and one for JREDA's field executive Engineer).
iii. Certificate for minimum seven days of satisfactory performance with photographs of each installed SSLs with GPS Co-ordinates in Hard copy (HD).
iv. Hardcopy of 07 days System Performance Report Downloaded from RMS Portal, in case unavailability of cellular network the agency has to submit declaration regarding unavailability of cellular network and have to submit running status of the system with geotag Photographs.

For CMC: Rest 20% of the contract Price shall be paid @4% of the Contract Price on Completion of every one-year Period of the 05 Year CMC Period. Payment against CMC (2nd Part) can be released after submission of duty pledged DD/BG/FDR/TDR of 4% for each year valid up to CMC period. The BG/FDR will be release after submission of CMC documents in prescribed format. The Payment shall be released 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- 14.

The payment for the items to be procured/installed will be released on availability of funds. "The efforts will be made by JREDA to make available the due payments to the agency within three months against satisfactory completion of the work."

7. Dispatch Instructions:

All items/equipment's shall be subject to **Pre-Dispatch Inspection (PDI)** by JREDA or its authorized representatives at the manufacturing site before their dispatch. The sample size for PDI shall be in accordance with BIS norms or @ 2% of the quantity offered, whichever is lesser. The manufacturing site must have sufficient testing facilities. The manufacturer will submit **test report** with regard conformity to technical specifications for the items to be dispatched to work site of JREDA. However, equipment's will be Dispatched from the manufacturing site only after the receipt of **"Dispatch Clearance**" from JREDA after acceptance of test report.

Randomly selected Sample/s from each lot offered for PDI, may be sent to MNRE approved or NABL accredited lab for verification of Specifications and Performance of the System. The cost of such tests shall be borne by JREDA.

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 equipment's for testing the materials to be supplied during the pre-dispatch inspection by JREDA at their manufacturer's unit. Failure to fulfill the PDI conditions shall lead to cancellation of work order and forfeiture of security deposit.

The items which are being procured trough this bid have to be distributed/installed on the basis of demand to be received by JREDA. Therefore, JREDA does not take responsibility that it will procure 100% quantity as has been indicated in the bid. Further, as JREDA will receive the demand, the supply order shall be placed to the successful bidder for execution in due time.

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

Accordingly, the work of supply & installation will be completed by the vendor within 90 days' period from the date of issue of dispatch instruction. The bidders shall have no claim regarding economy of scale, choice of district/s or choice of region in the state, for the purpose of transportation of items/materials to the demand/work sites.

8. Liquidated Damages for Delay in Completion:

If the supplier fails in the due performance of the contract to deliver any part of the equipment or complete the work within the time fixed under the contract or any extension thereof granted to him by JREDA and/or to fulfill his obligations in time under the contract, he shall be liable to pay to JREDA **@0.5%** per week maximum up to **10%** of work value delayed beyond contract period.

9. 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. Insurance:

The contractor shall arrange for transit and erection insurance of the material and equipment's up to the commissioning of the project as well as insurance of the material and equipment's up to 5 Years from the date of commissioning of the project. In case of any theft or damage of equipment during the entire period ie. Pre commissioning and 5 years post commissioning, the same will be responsibility of the contractor.

11. Assignment/ Sub-letting:

The Manufacturer shall not assign or sublet in whole or part of the work, and its obligations to any third party to perform under the order/contract. However, the manufacturer can procure those materials from any other manufacturer, which are not manufactured by the firm.

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. 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/BOQ or not.

13. 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. 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. Income Tax / GST:

Without prejudice to the obligations of the supplier under law, any income tax and GST 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. 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.

17. Cancellation of Work Order:

JREDA will be at liberty to terminate/blacklist in part or full the awarded contract and / forfeit security deposit and/or performance guarantee without prejudicing its rights and affecting the obligations of the Contractor by giving 15 (Fifteen) days' notice in writing in the following events:

(a) If the contractor/supplier is found defaulter for delayed supply, installation & commissioning or failure to deliver satisfactory performance or supply of substandard materials.

(b) If the contractor/supplier fails to comply with the provision(s) of the contract including the responsibilities to fulfill the 5 years CMC as per the provisions mentioned.

(c) If the Contractor/vendor is involved in any action of moral turpitude.

(d) While taking decisions for blacklisting of the bidder, his past performance shall also be taken into account.

18. Jurisdiction of the Court:

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

19. JREDA should Place Solar Street light order as per the different capacity required by the end users.

Section-6

Technical Specification for
LED SOLAR STREET LIGHTING SYSTEM

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

A standalone solar photovoltaic street lighting system (SLS) is an outdoor lighting unit used for illuminating a street or an open area. The Solar Street Lighting System consists of solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, inter-connecting wires/cables, module mounting pole including hardware and battery box. The luminaire is based on White Light Emitting Diode (W-LED), a solid-state device which emits light when electric current passes through it. The luminaire is mounted on the pole at a suitable angle to maximize illumination on the ground. The PV module is placed at the top of the pole at an angle facing south so that it receives solar radiation throughout the day, without any shadow falling on it. A battery is placed in a box attached to the pole.

Electricity generated by the PV module charges the battery during the day time which powers the luminaire from dusk to dawn. The system lights at dusk and switches off at dawn automatically.

A. BROAD PERFORMANCE SPECIFICATIONS

Type	Model-I	Model-II	Model-III
PV Module	12V, 100Wp poly/mono	12V, 150Wp poly/mono	24V, 200Wp poly/mono
Battery	12.8V 40Ah	12.8V,60Ah	12.8V,80Ah
Luminary	W-LED 20Watt	W-LED 30Watt	W-LED 40Watt
Light Source & output	The luminaire must use high efficacy W-LED with minimum 135 lumens per watt and UV free.	The luminaire must use high efficacy W-LED with minimum 135 lumens per watt and UV free.	The luminaire must use high efficacy W-LED with minimum 135 lumens per watt and UV free.
	Luminous Efficiency > 125 Lumen/watt	Luminous Efficiency > 125 Lumen/watt	Luminous Efficiency > 125 Lumen/watt
	The luminaire should have two levels of light to take care of different lighting needs during the night. Minimum 20 Lux when measured at a point 4.5 meters below the light (at'' High'' illumination level). The illumination Should be uniform without dark bands or abrupt variations. Minimum 10 Lux at lower illumination level.	The luminaire should have two levels of light to take care of different lighting needs during the night. Minimum 18 Lux when measured at a point 5 meters below the light (at'' High'' illumination level). The illumination Should be uniform without dark bands or abrupt variations. Minimum 10 Lux at lower illumination level.	The luminaire should have two levels of light to take care of different lighting needs during the night. Minimum 18 Lux when measured at a point 5 meters below the light (at'' High'' illumination level). The illumination Should be uniform without dark bands or abrupt variations. Minimum 10 Lux at lower illumination level.
	Color Temperature: Between 5500 K to 6500 K.		
	CRI ≥ 70		
	Life Span > 5000 hours		
	Luminous intensity distribution should follow the batwing patterns in polar curves		
	W-LEDs should not emit ultraviolet light		
	The light output from the white LED light source should be constant throughout the duty cycle		
	The temperature of heat sink should not increase more than 20°C above ambient temperature during the dusk to dawn operation		
	LED should have in built DC-DC type driver		

Mounting of light	Height of Pole: 6 m (Tubular pole) meters above the GL (20W) Height of Pole: 7 m (Octagonal) meters above the GL (30W) Height of Pole: 7 m (Octagonal) meters above the GL (40W) Thickness- 3mm Dia- Top- 70mm, Bottom- 130mm Base Plate- 225x225x16mm Single Arm Bracket- 1000mm Bolt Size (No. x dia.) (mm)- 4x20x750 Pole should be as per IS 2713 (Part II) 1980. Luminaire shall be at least 4.5m for 20W, 6m for 30W and 6m for 40W above the ground level. Surface Lux level should be 20 lux under the light pole.
Electronics Efficiency	Overall total Efficiency of the Electronics should be Minimum 90%
Duty cycle	3 days or Minimum 24 operating hours per permissible Discharge
	Dusk to dawn First 4 Hours full light (Min. 24 Lux), rest of the time at lower light (50%, Min. 12 Lux) level. (Higher light output will be preferred)
Ingress Protection – IP	Optical and Control gear compartment – IP 65 / IP 66
Impact resistance of casing	≥ IK 08
Radiated Emission Test	As per CISPR-15
ESD (Electrostatic Discharge) and Radiated susceptibility test	As per IEC 61547

PV MODULE:

i. Modules supplied with the Solar Street Light systems shall have certificate as per IS14286/IEC 61215 specifications or equivalent National or International/ Standards. STC performance data supplied with the modules shall not be more than one-year-old.

ii. Modules must qualify to IS/IEC 61730 Part I and II for safety qualification testing.

iii. The minimum module efficiency should be minimum 16 percent and fill factor shall be more than 70 percent.

iv. Modules must qualify to IEC TS 62804-1:2015 for the detection of potential-induced e-gradation.

v. The open circuit voltage* of the PV modules under STC should be at least 21.0 Volts.

vi. The PV Modules must be warranted for output wattage, which should not be less than 90% of the rated wattage at the end of 10 years and 80% of the rated wattage at the end of 25 years.

vii. The name plate shall conform the IS 14286/IEC61215
Each PV module must use a RF identification tag (RFID), which must contain the following following information:

a. Name of the manufacturer of PV Module

b. Name of the Manufacturer of Solar cells

c. Month and year of the manufacture (separately for solar cell and module)

d. Country of origin (separately for solar cells and module)

e. I-V curve for the module

f. Peak Wattage, Im, Vm and FF for the module

g. Unique Serial No and Model No of the module

h. Date and year of obtaining IEC PV module qualification certificate

i. Name of the test lab issuing IEC certificate

j. Other relevant information on traceability of solar cells and module as per ISO 9000 series. The RFID must be inside of module lamination. The module laminate but must be able to withstand harsh environmental conditions. It must also have appropriate Barcode in it. A distinctive serial number starting with NSM will be engraved on the frame of the module or screen printed on the tedlar sheet of the module.

REMOTE MONITORING SYSTEMS:

***The load voltage and VOC conditions of the PV modules are not applicable for the system having MPPT based charge controller. Remote monitoring facility will be integrated with MPPT charge controller, and it would record system parameters at fixed time interval of 10 minutes for system health analysis. Recorded data should be download in PDF, XLS, JPEG, PNG and SVG Format. Recorded data should be available online for 60 days of limited time.**

Requirements of RMS and integration with State Solar Energy Data Management Platform

1. State Nodal Agency/Implementing Agency will have a common State Level Solar Energy Data Management platform (SEDM) to ensure third party performance monitoring as per
   Communication Architecture Guidelines.
2. SEDM should have following minimum features or modules:
   a. Solar System Performance: Energy Generation
   b. Streetlight Performance: Running Hours, Full Brightness Hours, Half Brightness Hours
   c. Remote Monitoring System Performance: %Device Connectivity, %Data Availability etc.
   d. Events and Notifications: Faults related to Solar generation, Battery, Luminary
   e. Asset Management: Ratings, Serial Number, Make, Model Number of Luminary, Panel and Controller etc.
   f. Complaint and Ticket Management
   g. Field Mobile Application: Generation, Running Hours, Complaint logging
3. Remote Monitoring System (RMS) provided by all bidders should connect to State Level Solar Energy Data Management platform
4. Communication Architecture between SEDM and RMS should be as per following:

a. Communication Connectivity:

i. **Solar Streetlight Controller Connectivity:** Communication between Remote Monitoring System and Controller should be on RS485 MODBUS RTU protocol / UART to ensure interoperability irrespective of make and manufacturer
ii. **Remote Connectivity:** Communication between Remote monitoring system and SEDM should be using GSM/GPRS/2G/3G/4G cellular connectivity
iii. **Local Connectivity:** Ethernet/Bluetooth/Wi-Fi connectivity to configure parameters, notifications, communication interval, set points etc. or to retrieve locally stored data

b. Communication Modes:

i. Push Data on Event/Notification
   1. Luminary Status Change: On/Off
   2. Fault: Solar Module, Battery, Luminary
ii. Push Data Periodically: important parameters (as mentioned in tender) should be pushed to state server on configurable interval
   1. Instantaneous Parameters: Voltage, Current, Power, Brightness Level, Battery Charge Level
iii. Pull On demand: If required, central server can fetch data from device on user demand or request
   1. Update Status of latest values and parameters at control room on request instead of waiting for 2 Hours

iv. Command On Demand:
    1. Activate or deactivate Astronomical Mode
    2. Send Command to switch on or off Streetlight in case of environmental issues or patrolling or testing
v. Configuration Update:
    1. Update schedule for brightness level operation hours

c. Communication Protocol:

i. RMS should provide data on scalable IoT communication protocols as required by respective SNA to establish communication with thousands of systems.

d. Security:

i. Communication between RMS and Server should be **secured and encrypted** using TLS/SSL/X.509 certificate etc.
ii. As a part of IoT protocol, **Authentication and Authorization** should be implemented using token/password mechanism

e. Message Format:

i. RMS should provide data in a JSON message format as required by respective SNA

f. Data Storage:

i. In case of unavailability of cellular network, RMS should store data locally and on availability of network it should push data to central Server

5. MQTT Topic Structure

Application Node / Version	Solution Type	Device ID	Message Type	Access Level
IioT-1	Solar street light	IMEI Number	Info	Subscribe
			OTP	Subscribe
			Data	Publish
			On Demand	Subscribe
			Configuration	Subscribe

BATTERY:

Battery shall be Lithium Ferro phosphate (LiFePo4) with maximum Depth of Discharge **90%,** the batteries should conform to the latest BIS /International standards. The battery shall be of LiFePo4 storage batteries as per BIS standards with control electronics, BMS, interconnecting wire/cables properly sealed. Should have designed battery management system (appropriate over charging, over heating deep discharge protection).

i. Minimum 12.8V, 40Ah/60Ah/80Ah capacity Lithium Ferro Phosphate Battery.
ii. Battery pack should have proper 'Battery management System' (BMS) for cell balancing, over charge and over temperature protection.
iii. Battery should conform to the latest BIS/ International standards.
iv. Cells should conform to latest BIS/International Standards. BIS/IEC/UN and CE certified cells should only be used.
v. Cells should have safety vent cap for releasing of excess internal cell pressure.
vi. The batteries shall be designed for operating in ambient temperature of site up to 55-degree C.
vii. The self-discharge of batteries shall be less than 2 % per month of rated capacity at 27-degree C.

LIGHT SOURCE:

i. The light source will be a Cool white LED type.

ii. The color temperature of white LED used in the system should be in the range of 5500K–6500K.

iii. W-LEDs should not emit ultraviolet light.

iv. The light output from the white LED light source should be constant throughout the duty cycle.

v. The lamps should be housed in an assembly suitable for outdoor use.

vi. The temperature of heat sink should not increase more than 20°C above ambient temperature during the dusk to dawn operation.

vii. The Lamp should be illuminated with 30% when no movement under the Polar Curve of light. Light should be illuminated 100% whenever any movement sense under the Polar Curve of light.

Common Technical Requirements

ELECTRONICS:

i. The total electronic efficiency should be at least 90%.

ii. Charge controller should be MPPT Type.

iii. Electronics should operate at an appropriate voltage suitable for proper charging of the battery.

iv. No Load current consumption should be less than 40 mA.

v. The PV module itself should be used to sense the ambient light level for switching ON and OFF the lamp.

vi. The PCB containing the electronics should be capable of solder free installation and replacement.

vii. Necessary lengths of wires/cables, switches suitable for DC use and fuses should be provided.

viii. Remote monitoring facility will be integrated with MPPT charge controller, and it would record system parameters at fixed time interval of 10 minutes for system health analysis. Recorded data should be download in PDF, XLS, JPEG, PNG and SVG Format. Recorded data should be available online for 60 days of limited time.

ix. RMS system should be Communicate 24x7 with the portal.

ELECTRONIC PROTECTIONS:

i. Adequate protection is to be incorporated under "No Load" conditions e.g., when the lamp is removed, and the system is switched ON.

ii. The system should have protection against battery overcharge and deep discharge conditions.

iii. Fuse should be provided to protect against short circuit conditions.

iv. Protection for reverse flow of current through the PV module(s) should be provided.

v. Electronics should have temperature compensation for proper charging of the battery throughout the year.

vi. Adequate protection should be provided against battery reverse polarity.

vii. Load reconnect should be provided at 80% of the battery capacity status.

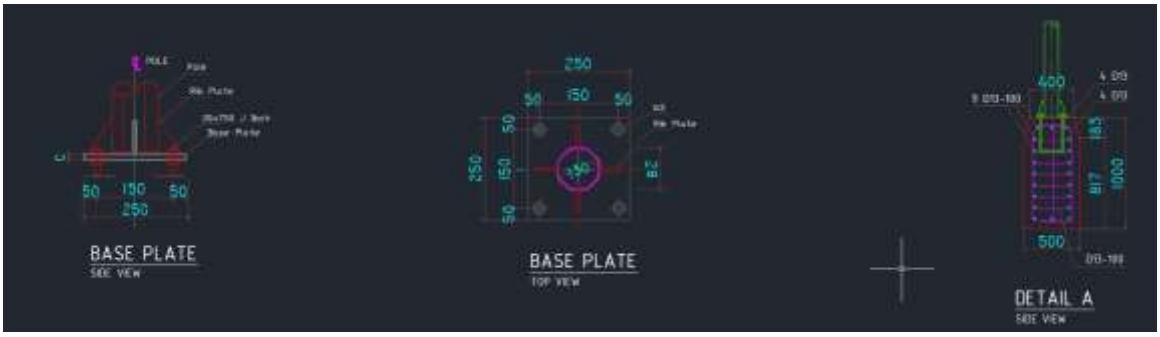
MECHANICAL COMPONENTS:

i. A corrosion resistant metallic frame structure should be fixed on the pole to hold the SPV module.

ii. The frame structure should have provision so that the module can be oriented at the suitable tilt angle.

iii. Pole should be Hot dip galvanized pipe as per IS1161 & IS4736 i.e., Class B.

iv. The height of the pole should be as per mention in **"Section 6 (Broad Performance Specifications A/B)"**. Civil Foundation Mixing of the pole should be M20/25.



v. The pole should have the provision to hold the luminaire and Battery (if applicable).

vi. The Luminaire housing should be waterproof (IP 65) and should be painted with a corrosion resistant paint and should be housing the battery.

vii. Proper arrangement to emboss logo of State government and JREDA at visible height.

INDICATORS:

i. The system should have two indicators, green and red.

ii. The green indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged.

iii. Red indicator should indicate the battery "Load Cut Off" condition.

QUALITY AND WARRANTY:

i. The street lighting system (including the battery) will be warranted for a period of five years from the date of Supply/Commissioning.

ii. **The PV module(s) will be warranted for a minimum period of 25 years from the date of supply.** The PV modules must be warranted for their output peak watt capacity, which should not be less than 90% at the end of Ten (10) years and 80% at the end of Twenty-five (25) years.

iii. The Warranty Card to be supplied with the system must contain the details of the system**.**

OPERATION and MAINTENANCE MANUAL:

An Operation, Instruction and Maintenance Manual, in English and the local language, should be provided with the Solar Street Lighting System. The following minimum details must be provided in the Manual:

- Basic principles of Photovoltaics.
- A small write-up (with a block diagram) on Solar Street Lighting System – its components, PV module, battery, electronics and luminaire and expected performance.
- Type, Model number, Voltage & capacity of the battery, used in the system.
- The make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of W-LEDs used in the lighting system.
- About Charging and Significance of indicators.
- Clear instructions about erection of pole and mounting of PV module (s) and lamp housing assembly on the pole.

- Clear instructions on regular maintenance and troubleshooting of the Solar Street Lighting System.
- DO's and DONT's.
- Name and address of the contact person for repair and maintenance, in case of non-functionality of the solar street lighting system.

Technical Standards Follows:

Item / System	Applicable BIS /Equivalent IEC Standard Or MNRE Specifications	
	Standard Description	Standard Number
Solar PV Systems	Crystalline Silicon Terrestrial PV Modules Junction boxes for Photovoltaic modules – Safety requirements and tests	IEC 61215-1 / IS14286/ IS 16077 IEC 62790: 2014
		Test Certificates / Reports from IECQ / NABL accredited laboratory for relevant IEC / equivalent BIS standard.
	Safety Qualification	IS/IEC 61730 (PART I & II)
Electronics		EN50530
Charge Controller/MPPT Units and Protections		IEC 62093 Equivalent BIS Std.
Storage Batteries	General Requirements & Methods of	IS 16270 IS 16046:2015/ equivalent BIS
	Testing	standard
Cables	General Test And Measuring Method PVC insulated cables for working voltage up to and including 1100 V UV resistant for outdoor Installation	IEC 60189 IS 694/ IS 1554 IS/IEC 69947 UL 1581 UL 4703
Junction Boxes /Enclosures for Inverters/Charge Controllers/Luminaries	General Requirements	IEC 62208 IP 65
LED Lights & Luminaires	LED performance Luminary performance Driver safety General Lighting – LEDs and LED modules – Terms and Definitions Self-Ballasted LED Lamps for General Lighting Services Led Modules for General Lighting Luminaires Performance	LM -80-08 LM 79-08 IEC62384 IS 16101 IS 16102 IS 16103 IS 16107
Connectors	Connectors for DC-application in photovoltaic System Safety requirement test	IEC 62852: 2014
Protection	Over charge Deep discharge protection for battery Reverse Polarity for panel and battery	

Annexure-1

Format for Covering Letter

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

(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: **Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40Wwhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).**

Sir,

We are hereby submitting our offer in full compliance with the terms and condition of the above NIB No…….. under category……(General/MSEs/New MSEs) We have submitted the requisite amount of **Tender Fee & EMD through online mode (Receipt must enclosed)** as specified in the tender document. Earnest Money through online mode is valid for twelve months. Bid will be evaluated under the provision of applied category and No further claim for the change will be for the applied category.

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

Note: MSME bidders of Jharkhand must submit necessary documents for claiming exemption of EMD and Bid fee.

(Signature of Authorized Signatory)
Name:
Designation:
Company Seal:

Annexure-1a

Undertaking by MSMEs of Jharkhand for availing preferential treatment

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

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

I/We_____ (here in after referred to as MSE bidder) being desirous of tendering for the 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

i. The Manufacturing or Services unit is located at……..District …. in the State of Jharkhand.

ii. The Head office or Corporate Office of the unit/company/enterprise is at…… within the territorial jurisdiction of Jharkhand.

iii. The unit/company/enterprise is registered with (tick):-

   a. Directorate of industries/District Industries Center, (Copy attached).
   b. Khadi and Village Industries Board, (Copy attached).
   c. Directorate of Handloom, Sericulture and Handicraft of Jharkhand Govt., (Copy attached).
   d. Industrial Area Development Authorities, (Copy attached).
   e. National Small Industries Cooperation Ltd, (Copy attached).
   f. Other body specified by Directorate of Industries, Jharkhand Govt. from time to time and other industrial units/enterprises which have submitted IEM and been issued Date of Production (DOP) certificate by GM, DIC/MD, Industrial Area Development Authorities Director, Industries, GoJ.
   g. MSE having Udyog Adhar Number…….. issued by Ministry of Micro, Small and Medium enterprises, GoI and has been duly verified, whether unit is existing / functional and doing regular production at
   ……..(Specify capacity) by GM, DIC/MD, Industrial Area Development Authorities / Director, Industries, GoJ", (Copy attached).

iv. The unit/company/enterprise is registered under Jharkhand Goods and Services Tax (JGST) Act-2017 or The Central Goods & Services Tax (CGST) Act 2017, (Copy attached).

v. The unit/company/enterprise have encouraged local people in employment.

vi. The unit/company/enterprise complies with all statutory and legal formalities of concerned regulators/ Act.

vii. That the product/services being supplied to JREDA has been manufactured/created by the unit located in Jharkhand only and agree to submit details of batch number/date or any other identifiable tag as per prevalent practice.

(Signature of Authorized Signatory)

Name:
Designation:
Company Seal:

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

Annexure-2

Check List for Technical bid

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

S. No.	Particulars	Uploaded Yes / No	Page No.
1	Scan Copy of Challan / Receipt of Tender Fee and EMD submission through Online Via SBI Payment gateway of Jharkhand Tender.		
2	Firm's registration certificate company /Pvt. Ltd. / Proprietorship firm/Partnership/corporation/ LLP		
3	Registration certificate of MSMEs of Jharkhand (Certificate issued by GM DIC Industry Dept. for system/components manufacturing)		
4	To indicate the functionality of the firm, attach the Audited Account of last three years ending 31.03.2024 of the firm duly certified by Statuary Auditor with ITR.		
5	ITR for the assessment year AY 2022-23, 2023-24 & 2024-25.		
6	Financial Statements (i.e., Balance sheet & Statement of Profit or Loss) for the last 3 financial years FY 2021-22, 2022-23 & 2023-24 as certified by Chartered Accountant.		
7	Annual Turnover (FY-2021-22, 2022-23 & 2023-24) as certified by Chartered Accountant		
8	Net Worth certificate (FY-2021-22, 2022-23 & 2023-24) as certified by Chartered Accountant		
9	GST Certificates		
10	PAN Card		
11	List of current litigant cases in which the bidder is involved (in format given in ITB).		
12	An affidavit for non-engagement of related persons.		
13	Authorized address & contact numbers of the bidder as per instruction in the Notice Inviting Bid duly digitally signed.		
14	Bid Capacity Declaration.		
15	Covering Letter as per **Annexure-1**.		
16	Covering Letter as per **Annexure-1**a		
17	Checklist for Technical Bid as Per **Annexure-2**		
18	Information about the Bidder as per **Annexure-3.**		
19	Declaration by Bidder as per **Annexure-4.**		
20	Average Annual Turnover for last three years ending 31.03.2024(Attach average annual turnover certificate as per **Annexure-5)**		
21	Net worth as on 31.03.2024 (Attach proof & Net worth certificate as per **Annexure-6**)		
22	Format for Power of Attorney **Annexure 7**		
23	The proof of supply of solar system in any SNA/Govt. organization/PSU in the last seven years as Per **Annexure-8 to** indicate the quantity already supplied. Attach copy of the order and certificate indicating its successful execution.		
24	Price Bid **Annexure-09**		
25	Contact Person for the NIB**. Annexure-10**		
26	The bidder is registered PV System Integrator or Manufacturing company of SPV cells or PV Modules or Battery or PV System Electronics confirming to relevant National/International Standards (Attach relevant certificates of Industry Department or MNRE).		
27	IEC/IS certificates for Solar PV Module (Attach relevant certificate).		
28	Test certificate for solar Street Lighting System from the authorize test centers of MNRE (attach valid test certificate issued in the name of bidder) as per MNRE specification or section 6 of technical specification of this NIB.		
29	Certificate of Battery (Attach valid certificate).		

30	Cover Letter for Certificates of Delivery **Annexure-11**		
31	Cover Letter for Certificates of Installation **Annexure-12**		
32	Format for Quarterly O&M and CMC Report **Annexure-13**		
33	Warrantee Card **Annexure-14** Cover Letter as Per **Annexure 15**		
34	Cover Letter as Per **Annexure 16**		
	Declaration of the Bidder **Annexure-17**		
35	JREDA Contractor Registration Certificate.		

**** Please number the pages of the uploaded documents and write it 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 take 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:

Annexure-3

Information About the Bidding Firm

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

(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-7**)	
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.	GST Number (Attach proof)	
12.	Specify the Item Originally Manufactured by the Bidder (SPV module/Electronics/Battery)	
13.	Registration Number of the firm/co. (Copy of Registration Certificate issued by Industry Department)	
14.	Details of in-house testing facility (Attach Proof)	
15.	Office/ Dealer and Service network in Jharkhand with TIN No.(Give details)	
16.	Applied Category (20W/30W/40W)	
17.	Quoted quantity	
18.	Particulars of Earnest Money	
19.	Place where Materials will be Manufactured	
20.	Place where Materials will be Available for Inspection	
21.	Other details and remarks, if any	
2**2.**	Type of Bidder General/MSEs/NEW MSEs	

Yours faithfully,

(Signature of Authorized Signatory)
Name
Designation
Company seal

Annexure-4

Declaration by the Bidder

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

(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 or blacklisted by any SNA/ Government Dept. /PSU etc.
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:

Annexure-5

Format For Financial Requirement – Annual Turnover

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

[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: **Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40Wwhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).**

We certify that the Bidding Company had an average Annual Turnover of Rs. ---------- -- based on audited annual accounts of the last three years ending 31.03.2024

Sl. No.	Financial Year	Turn over (in Rupees)
1	2021-22	
2.	2022-23	
3.	2023-24	
	Average Annual Turnover	

UID No.: ……

Authorised Signatory
(Power of Attorney holder)

Statutory Auditor
(Stamp & Signature)

Annexure-6

Format For Financial Requirement – Net Worth Certificate

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

[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: **Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40Wwhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).**

This is to certify that Net worth of _____{insert the name of Bidding Company}, as on 31st March 2024 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 March 2024	

UID No.: ……

Authorised Signatory
(Power of Attorney holder)

Statutory Auditor
(Stamp & Signature)

Annexure -7

Format of Power of Attorney for Signing Bid

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

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: 06/JREDA/SPV/SSLS(LED)/25-26,** 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 (Name, Designation and

Seal) Accepted by

…….. (Signature) (Name, Designation and Seal)

(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.

Annexure-8

Details of Orders Received and Executed in Last 7 Years

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

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

SL. No.	Name of Agency/Organization	Details of Work Order / Purchase Order	Order Amount (in Rs.)	Order Unit/Commissioned capacity as per WO	Details of Performance/ Completion certificate	Page number of the Work order/ purchase order submitted	Page number of the Performance / Completion certificate submitted

Yours faithfully,

(Signature of Authorized Signatory)

Name:

Designation:

Company

Seal:

Note:

- Attach Photocopies of Purchase Orders.
- Attach Photocopies of Certificate of Satisfactory Performance Issued by Concerned Nodal Agency/PSU/ Govt. Organization.
- Separate sheet may be used for giving detailed information in seriatim duly signed with page number. Proof of work order/purchase order and corresponding performance certificate should be submitted/enclosed in the bid.

Annexure-9

Price Bid (To be submitted in.pdf file with price bid)

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

Sub: Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40W white LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).

Sl No.	Description	Quoted Quantity	unit	Unit Rate (in Rs.)	Amount (in words)
1	20W solar street lighting system with Remote monitoring system				
2	30W solar street lighting system with Remote monitoring system				
3	40W solar street lighting system with Remote monitoring system				
Total					

1. Above quoted price for LED based SSLS are complete in all respect as per Technical Specifications exclusive as applicable for Central/State GST taxes & inclusive of duties, packing, forwarding, transit insurance, loading & unloading, transportation & other charges etc. FOR destination at any site in Jharkhand and inclusive of installation, testing, commissioning, performance testing and training.

2. Certified that rates quoted for LED based SSLS are as per specifications, terms & conditions mentioned in the bid document.

(Signature of Authorized Signatory)
Name:
Designation:
Company Seal:

(This bid Performa must be submitted in financial bid duly signed by the bidder. In case there is any mismatch between Price BOQ in EXCEL format and price breakup in PDF format then bid will be rejected)

Annexure-9A

Item Rate BoQ

Name of work: Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40WWhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).

Contract No: 06/JREDA/SPV/SSLS(LED)/25-26

Bidder Name:					
PRICE SCHEDULE (The BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender Bidders are allowed to enter the Bidder Name and Values only)					
SI No.	Item Description	Units	Unit RATE in Figures To be entered by the Bidder (Exclusive of GST and inclusive of all other taxes & Charges)	TOTAL AMOUNT (exclusive of GST and inclusive of all other taxes & charges)	Total Amount In words
1	2	3	4	5	6
1	Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40WWhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).				
2	Solar PV Module (12V, 100W)	Nos			
3	Li Ferro Phosphate Battery (12.8V 40Ah)	Nos			
4	Luminary with all other electronics accessories including charge controller	Nos			
5	Remote monitoring system (RMS)	Nos			
6	Pole with battery box	Nos			
7	Installation & commissioning including any other associated work	Nos			
8	Any other cost/charges	Nos			
9	CMC for Five Years	Nos			

(This bid Performa must be submitted in financial bid duly signed by the bidder. In case there is any mismatch between Price BOQ in EXCEL format and price breakup in PDF format then bid will be rejected)

Annexure-9B

Item Rate BoQ

Name of work: Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40WWhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).

Contract No: 06/JREDA/SPV/SSLS(LED)/25-26

Bidder Name:					
PRICE SCHEDULE (The BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender Bidders are allowed to enter the Bidder Name and Values only)					
SI No.	Item Description	Units	Unit RATE in Figures To be entered by the Bidder (Exclusive of GST and inclusive of all other taxes & Charges)	TOTAL AMOUNT (exclusive of GST and inclusive of all other taxes & charges)	Total Amount In words
1	2	3	4	5	6
1	Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40WWhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).				
2	Solar PV Module (12V, 150W)	Nos			
3	Li Ferro Phosphate Battery (12.8V 60Ah)	Nos			
4	Luminary with all other electronics accessories including charge controller	Nos			
5	Remote monitoring system (RMS)	Nos			
6	Pole with battery box	Nos			
7	Installation & commissioning including any other associated work	Nos			
8	Any other cost/charges	Nos			
9	CMC for Five Years	Nos			

(This bid Performa must be submitted in financial bid duly signed by the bidder. In case there is any mismatch between Price BOQ in EXCEL format and price breakup in PDF format then bid will be rejected)

Annexure-9C

Item Rate BoQ

Name of work: Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40WWhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).

Contract No: 06/JREDA/SPV/SSLS(LED)/25-26

Bidder Name:	

PRICE SCHEDULE

(The BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender Bidders are allowed to enter the Bidder Name and Values only)

SI No.	Item Description	Units	Unit RATE in Figures To be entered by the Bidder (Exclusive of GST and inclusive of all other taxes & Charges)	TOTAL AMOUNT (exclusive of GST and inclusive of all other taxes & charges)	Total Amount In words
1	2	3	4	5	6
1	Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40WWhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).				
2	Solar PV Module (24V, 200W)	Nos			
3	Li Ferro Phosphate Battery (12.8V 80Ah)	Nos			
4	Luminary with all other electronics accessories including charge controller	Nos			
5	Remote monitoring system (RMS)	Nos			
6	Pole with battery box	Nos			
7	Installation & commissioning including any other associated work	Nos			
8	Any other cost/charges	Nos			
9	CMC for Five Years	Nos			

(This bid Performa must be submitted in financial bid duly signed by the bidder. In case there is any mismatch between Price BOQ in EXCEL format and price breakup in PDF format then bid will be rejected)

Annexure-10

Contact Person for the NIB

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

[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	

1	Contact Person name for the Admin Project Execution	
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:

Annexure-11

Certificate of Delivery of LED Based Solar Street Lighting Systems received from the Consignee as Proof of Compliance by the Supplier

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

Certificate

Name of Consignee: ……, Designation: -……

Name of Department: ……..

Address of Department: …….

……..……

Certified that we have received the following materials for installation of……Nos. of LED Based Solar Street Lighting Systems:

1. Serial nos. of SPV Modules with Make and Model……
2. Serial nos. of Batteries with Make and Model……
3. Serial nos. of LED Luminaries with Make and Model……
4. Serial nos. of Charge Controller with Make & Model……
5. Other materials……

Above materials have been supplied by M/s…… on……

Signature of Consignee along with Seal/ JREDA Official……

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

Annexure-12

Certificate of Installation of LED Based Solar Street Lighting Systems received from the Consignee as Proof of Compliance by the Supplier

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

Certificate

Name of Consignee: ……, Designation: ……

Name of Department: ……

Address of Department: ……

……

Certified that M/s …… has successfully installed ……Nos. of LED Based Solar Street Lighting Systems on ……and are in working condition:

1. Serial nos. of SPV Modules with Make and Model……
2. Serial nos. of Batteries with Make and Model……
3. Serial nos. of LED Luminaries with Make and Model……
4. Serial nos. of Charge Controller with Make and Model……
5. Other materials: ……

Signature of Consignee along with Seal/ JREDA Official: ……

Date……..

Certificate of JREDA Representative

Certified that above LED Based Solar Street Lighting Systems have been successfully installed and are in working conditions.

Signature & Seal of Supplier

Signature & Seal of JREDA Representative

Annexure-13

Format for Quarterly O&M and CMC Report

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

[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: **Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40WWhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).**

Date of Installation.....

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

Place of Supply.....

Name of Technicians: .....

Period of CMC:……

S. N.	Place of Installed System	System Details	Date of Site Visit/CMC	Fault observation	Fault repaired	Status of the system
		Module No.				
		Battery No.				
		Charge Controller No.				
		Luminaire				
		RMS ID.				

(Signature of Consignee)
Name:
Designation:
Seal:

Signature of Agency with Seal

Signature of JREDA Representative

Annexure-14

Warrantee Card

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

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

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 27^0C	
	(g)	Guarantee Valid Up To	
6.	Details of Electronics & Other BOS Items		
	(a)	Name of the Manufacturer	
	(b)	Make	
	(c)	Model	
	(d)	Serial No(s).	
	(e)	Month & Year of Manufacture	
	(f)	Guarantee Valid Up To	
7.	Designation & Address of the Person to be Contacted for Claiming Warrantee Obligations		

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

Filling Instructions:

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

2. During the Guarantee period JREDA/users reserve the right to cross check the performance of the systems for their minimum performance levels specified in the MNRE specifications.

Annexure-15

Certificate of Delivery of Solar Street Lighting Systems
NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

[On the letterhead of Bidding Company]

To,
The Chief Officer, (Municipal Corporation)

_____

_____

_____

Dear Sir,

Sub: **Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40WWhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).**

M/s _____ (Supplier Name) have delivered the _____ Nos. Components of Solar

Street light System at the Location

_____ (Installation Location address)

Under the NIB No._____ and Work Order No:-_____/_____, Date

_____ as mention items below.

List of delivered Item (Write down the item name and quantity)

S. No.	Place of Delivery	Item Details	Date of Delivery	Status	Remark

(Signature & Stamp of Receiver)
Name of Receiver:
Designation:
Date:

Annexure-16

Certificate of Installation of Solar Street Lighting Systems
NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

[On the letterhead of Bidding Company]

To,
The Chief Officer, (Municipal Corporation)

_____

_____

_____

Dear Sir,

Sub: **Rate Contract for the work of Supply, Installation, Testing & Commissioning including 5 years Comprehensive Maintenance Contract (CMC) of 20W/30W/40WWhite LED based Solar Street Lighting Systems (SSLSs) with Lithium Ferro Phosphate Battery including Remote Monitoring System (RMS) under Solar Photovoltaic Programme on Turnkey basis across the state of Jharkhand (JREDA).**

M/s _____ (Supplier Name) have Successfully Installed the _____ Nos. of Solar

Street light System at the Location

_____ (Installation Location address)

Under the NIB No._____ and Work Order No:-_____/_____, Date

_____ Installed System is Healthy and operational (System operation monitored min. 7 days after Installation).

List of Installed Item (Write down the item name and quantity)

S. No.	Place of Installation	Item Details	Date of Installation	Status	Remark

(Signature & Stamp of Verifier)
Name of Authority:
Designation:
Date:

Annexure-17

Declaration by the Bidder

NIB No: 06/JREDA/SPV/SSLS(LED)/25-26

(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

Sr. No.	Particulars	Name of Group	Quoted Quantity/Capacity	Type of Bidder (General/MSEs/ NEW MSEs)
1	Bidder Quoted for Solar Street Light (Group A (20Watt), Group B (30Watt) & GroupC (40Watt)			

NOTE**

a. The bidder shall submit all valid Test certificate as per Applied group accordingly as per NIB terms & Conditions.

b. Bid will be evaluated under the provision of the applied category and no further claim will be considered for the change in the applied category.

(Signature of Authorized Signatory)

Name:

Designation