



## Chhattisgarh State Renewable Energy Development Agency (CREDA)

(Dept. of Energy, Govt. of Chhattisgarh)

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E-BID DOCUMENT No. 152278/CREDA-PMJANMAN/PVTG/SPVHLS/2023-24

Dated: 31.01.2024

**STANDARDIZATION OF RATES FOR DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF SOLAR PHOTOVOLTAIC HOME LIGHTING SYSTEM OF CAPACITY 300 W<sub>p</sub> WITH MANDATORY 5 YEARS COMPREHENSIVE MAINTENANCE CONTRACT (CMC) AND ONSITE UNCONDITIONAL WARRANTY AT ANYWHERE IN THE STATE OF CHHATTISGARH.**

Particulars	From Date & Time	To Date & Time	Place
Date of issue of notice inviting bid	31.01.2024 11:00 AM	-----	-----
Period of availability of bidding document at website	31.01.2024 05:00 PM	20.02.2024 05:00 PM	<a href="http://www.creda.co.in/Tenders">www.creda.co.in/Tenders</a> <a href="https://eproc.cgstate.gov.in">https://eproc.cgstate.gov.in</a>
Submission of Pre Bid queries in writing and through Email	31.01.2024 05:00 PM	07.02.2024 05:00 PM	To be submitted hard copy at CREDA HO, Raipur or through E-mail at <a href="mailto:credatendercell@gmail.com">credatendercell@gmail.com</a>
Date of Pre Bid Meeting	09.02.2024 12:00 PM	-----	At CREDA H.O., Conference Hall, Raipur.
Submission of Online Bid (Technical + e-Price Bid) and submission of documents in hard copy and Sample of Home Light	14.02.2024 05:00 PM	20.02.2024 05:00 PM	<a href="https://eproc.cgstate.gov.in">https://eproc.cgstate.gov.in</a> Hard Copy and Sample at CREDA H.O., Conference Hall, Raipur.
Inspection of Sample & Opening of Technical Bid	22.02.2024 12:00 PM Onwards		At CREDA H.O., Conference Hall, Raipur. ( <a href="https://eproc.cgstate.gov.in">https://eproc.cgstate.gov.in</a> )
Evaluation of technical bid and declaration of eligible bidder (The technical qualification part)	26.02.2024 03:00 PM Onwards		At CREDA H.O., Conference Hall, Raipur.
Opening of e- Price Bid	28.02.2024 03:00 PM Onwards		At CREDA H.O., Conference Hall, Raipur.

**Tender Document Cost– Rs.10,000.00 + 18% GST = Rs.11,800.00**

**(In words Rupees Eleven Thousand Eight Hundred Only) to be deposited in CREDA's account along with EMD via Demand Draft/ Pay Order or RTGS / NEFT.**

Document can be downloaded from our website [www.creda.co.in](http://www.creda.co.in) or from Chhattisgarh e-Procurement portal i.e. <https://eproc.cgstate.gov.in>.

CHHATTISGARH STATE RENEWABLE ENERGY DEVELOPMENT AGENCY

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NIT Ref. No. 15394/ CREDA-PMJANMAN/PVTG/SPVHLS/2023-24

Dated: 29.01.2024

**NOTICE INVITING BID**

CREDA invites online bid from System integrators having 5 years track record in installation of Solar off-grid Systems (with Battery), for Design, Supply, Installation and Commissioning of Solar Home Lighting System of Capacity of 300 Wp with 5 years Comprehensive maintenance contract (CMC) and onsite unconditional warranty anywhere in the State of Chhattisgarh as per details mentioned below-

Sl. No.	Item Description	Quantity (in Nos.)	Approx. Cost @50000.00*	EMD (In ₹)	Essentials
			(In ₹)		
1	Solar Home Lighting Systems (300 Wp Module/ (1250 Wh minimum) LFP Battery & BOS)*	870**	43500000/-	Rs 217500/-	As per clause no. 1A to 1F of Eligibility Criteria (Page no.9)

\* As per scheme guideline released by Ministry of New and Renewable Energy (MNRE) vide Order F no. 32/71/2023SPV Division Dated 04/01/2024

\*\*The number of systems may vary as per actual site requirement and future demand.

**Important Events and time schedule for this Bid are as follows –**

Particulars	From Date & Time	To Date & Time	Place
Date of issue of notice inviting bid	31.01.2024 11:00 AM	-----	-----
Period of availability of bidding document at website	31.01.2024 05:00 PM	20.02.2024 05:00 PM	<a href="http://www.creda.co.in/Tenders">www.creda.co.in/Tenders</a> <a href="https://eproc.cgstate.gov.in">https://eproc.cgstate.gov.in</a>
Submission of Pre Bid queries in writing and through Email	31.01.2024 05:00 PM	07.02.2024 05:00 PM	To be submitted hard copy at CREDA HO, Raipur or through E-mail at <a href="mailto:credatendercell@gmail.com">credatendercell@gmail.com</a>
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Submission of Online Bid (Technical + e-Price Bid) and submission of documents in hard copy	14.02.2024 05:00 PM	20.02.2024 05:00 PM	<a href="https://eproc.cgstate.gov.in">https://eproc.cgstate.gov.in</a>
Inspection of Sample & Opening of Technical Bid	22.02.2024 12:00 PM Onwards		At CREDA H.O., Conference Hall, Raipur. ( <a href="https://eproc.cgstate.gov.in">https://eproc.cgstate.gov.in</a> )
Evaluation of technical bid and declaration of eligible bidder (The technical qualification part)	26.02.2024 03:00 PM Onwards		At CREDA H.O., Conference Hall, Raipur.
Opening of e- Price Bid	28.02.2024 03:00 PM Onwards		At CREDA H.O., Conference Hall, Raipur.

Technical Bid and Price Bid shall be submitted online only at <https://eproc.cgstate.gov.in>. However Technical Bid (as per the checklist) also has to be submitted duly signed in hard copy to Tender Cell of CREDA, Raipur. If there is any discrepancy in the e-Bid and hard copy, only the documents in e-Bid shall be valid. **In no case the hard copy of documents shall be evaluated, it is only for record keeping of CREDA.** Bidders are advised to follow the instructions provided for Registration and e-Submission Process accordingly. (For any query about e-bidding please visit user manual at <https://eproc.cgstate.gov.in>).

Details of tender are uploaded in CREDA website and Tender Document can be downloaded from our website-[www.creda.co.in](http://www.creda.co.in).

**The Bidder shall have to deposit Tender Document cost along with EMD, as mentioned above, through Demand Draft/Pay Order or NEFT/RTGS payable to CREDA Raipur and should submit the proof of same along with tender submission.**

Bidders are requested to submit their suggestions/objections/ reservations, if any, with details so as to avoid any confusion and to ensure clarity and transparency regarding the Bid in writing or by e-mail.

Any Addendum/Corrigendum/Amendment Notice if arises will only be uploaded on CREDA's Website.

CREDA reserves all rights to accept/reject any or all tenders in full/part without assigning any reasons.

**Superintending Engineer  
(RE-V) H.O. CREDA,  
Raipur (C.G.)**

**CHECK LIST OF DOCUMENTS TO BE UPLOADED IN THE E-BIDDING PORTAL**

To ensure that your Bid uploaded on the Chhattisgarh e-Procurement portal i.e. <https://eproc.cgstate.gov.in> is complete in all respects, please go through the following checklist & tick mark for the enclosures attached with your Bid –

S. No.	Envelope	Description of documents to be uploaded in the e-bidding portal	Complied (Yes/ No)	Page No
1.	<b>A. Pre-Qualification</b>	EMD and Tender Document Fee submission form of the bidder confirmed by CREDA (as on page – 7)		
2.		Scanned copy of Undertaking of the Bidder as mentioned on Page –8 of the tender document on the letter head of bidder		
3.		Scanned copy of original tender document duly signed & with stamp on each page, as a confirmation of acceptance of the Terms & Conditions (T&C).		
4.		PAN, GSTIN issued in the name of the bidder		
5.		Self-certificate from Bidder on not being a debarred from Government contract or a blacklisted company.		
6.		Declaration of conflict of interest - by bidder about any relatives working with CREDA and Affidavit ( <b>Annexure II</b> ) ( <b>Hard Copy to be submitted as per Clause 4d, Section – 1</b> )		
7.		Copy of Registration: Certificate as System Integrator of CREDA in SPV Program valid at the time of submission of bid.		
8.		Valid Test Report of HLS as per MNRE technical specification from MNRE authorized, NABL accredited test centre		
9.	<b>B. Technical and Financial Qualification</b>	Original Net Worth Certificate duly signed by Chartered Accountant as on 31 <sup>st</sup> March 2023.		
10.		Original certificate for last three financial years Turnover i.e. 2020-21, 2021-22 & 2022-23 of work done in SPV Project.		
11.		Original ITRs for last three financial Years i.e. 2020-21, 2021-22 & 2022-23 of the bidder.		
12.		Completion and Performance Certificates of installation and commissioning of On-grid/Off-grid Solar/Solar Home Light System by the Bidder in Govt. Scheme of any state in 03 years (out of last 05 financial years i.e. 2018-19, 2019-20, 2020-21, 2021-22 & 2022-23). ( <b>Annexure I</b> ).		
13.		Proof of being Eligible Manufacturer of SPV Modules/PCU/Charge Controller/Batteries/other BOS.		
14.		Manufacture Authorization certificates of major components of solar power plants.		
15.		Technical Data Sheet for each component showing full technical details.		

**Note:** - Bidders shall have to also submit the original hard copies of the above mentioned documents.

**Details of EMD and Tender Document Fee**

Name of A/c	CREDA
Bank & Branch Name	ICICI Bank, Panchpedi Naka, Raipur
Bank Account Number	134601000400
Branch IFSC Code	ICIC0001346

Bid No. and Date	
Name of the Bidder	
<b>Bidder's Bank Account Details</b>	
(i) Name of the bank	
(ii) Branch	
(iii) IFSC Code	
(iv) Account No.	
(v) Transaction reference number	EMD - _____ ;Bid Document Fee - _____
(vi) Date of transaction	EMD - _____ ;Bid Document Fee - _____
(vii) EMD	Rs. ....../- In Words (Rs.....)
(viii) Bid Document Fee	Rs. ....../- In Words (Rs.....)

(Sign & Seal of the bidder)

**\*NOTE –**

1. The EMD and the Tender Document Fee shall have to be deposited as mentioned in the NIT in CREDA's bank account (amount mentioned above). Bidder shall have to upload the transaction details as above or a scanned copy of the DD (if transaction is done through DD)
2. In case the transaction is done through DD, the original DD has to be submitted in envelope as per Clause 4(d).

**UNDERTAKING OF THE BIDDER**  
**(To be submitted on letter head)**

I/We have read carefully and examined the notice inviting Bid, schedule, General Rules and terms and conditions of the contract, special conditions, Schedule of Rates and other documents and Rules referred to in the Bid document for the supply.

I/We hereby tender my rates for the execution of the work for CREDA, as specified within the time stipulated in the schedule in accordance with all aspects with the specifications, designs, drawings and instructions with such conditions so far as applicable.

I/We agree to keep the Bid valid for One Hundred Eighty (180) days from the due date of submission thereof and not to make any modifications in its terms and conditions.

**A sum of Rupees 217500.00 (Two Lakh Seventeen Thousand and Five Hundred Only) is hereby forwarded as Earnest Money in the form of crossed Demand draft/Pay order / RTGS / NEFT payable to CREDA at Raipur (C.G.).** If I/We fail to commence or complete the sanction ordered in specified time or fail to fulfill any condition of Bid document, I/We agree that the CREDA shall, without prejudice to any other right or remedy, be at liberty to forfeit the said Earnest Money absolutely. The said Earnest Money shall be retained by CREDA towards security deposit to execute all the works referred to in the Bid documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be required by CREDA.

I/We hereby declare that I/We shall treat the Bid documents, specifications and other records connected with the work as secret/confidential and shall not communicate information derived there from to any person other than a person to whom I/We have authorized to communicate the same or use the information in any manner prejudicial to the safety of CREDA/Government.

I/We shall abide to all the laws and shall be responsible for making payments of all the taxes, duties, levies and other Govt. dues etc. to the appropriate Govt. departments.

Our GST Registration No. \_\_\_\_\_ . The PAN No. under the Income Tax Act is \_\_\_\_\_.

I/We shall be responsible for the payment of the respective taxes to the appropriate authorities and should I/we fail to do so, I/we hereby authorize CREDA to recover the taxes due from us and deposit the same with the appropriate authorities on their demand.

I/We declare that none of our relatives is working in CREDA either on Regular/Contract/Placement basis or I/We don't have any partnership/subcontract obligation with any employee working in CREDA at present directly or indirectly and we will not enter in such obligation in future also. If any breach of declaration is found than we will be responsible for our debarment and any other action taken by CREDA.

Dated:

**Signature**

Place:

**Name of Bidder with seal.....**

**Witness:**

Signature: .....

Name: .....

Postal Address:

.....  
.....  
.....

**SECTION - 1**  
**INSTRUCTIONS FOR BIDDERS**

**1. ELIGIBILITY CRITERIA-**

**a. MINIMUM EXPERIENCE**

The bidders should have experience of successful execution of work for design, supply, installation & commissioning of any On-grid/Off-grid Solar/Solar Home Lighting System of cumulative capacity of **at least 100 kWp and above in 03 years (out of last 05 financial years i.e. 2018-19, 2019-20, 2020-21, 2021-22 & 2022-23).**

**b.** Bidders will have to submit experience & satisfactory performance certificates of Installed Systems (as mentioned above at 'a'), while submitting techno-commercial bid for respective capacity. All such documents must be self-attested by the authorized signatory. Experience certificate shall be submitted in attached format (as per **Annexure-I**) or in other format containing similar information shall be considered. Certificates should be in Hindi or English Language only. At the time of opening of technical bid, bidders shall have to present original documents, if required.

**c.** Bidders must have a **Positive Net worth (Positive Net worth means "Net value of the Assets minus (-) Net value of liabilities")** as on **31<sup>st</sup> March 2023**. They shall have to submit a copy of a copy of **Original CA Certified Certificate** duly signed by a qualified and registered Chartered Accountant having UDI number as a proof.

**d.** Bidders should have aggregate turnover of **Rs. 5 Crore** in respective years as stated in para "a" i.e. (FY **2018-19, 2019-20, 2020-21, 2021-22 & 2022-23**) in SPV On-grid/Off-grid Power Projects. Certified copies of the Comprehensive returns and audited balance sheet submitted to the Registrar of Companies/Income Tax Authorities should be enclosed. For the preceding years a Copy of **Original Summarized Sheet** of turnover certified by registered CA must be enclosed. **CREDA reserves the right to call for these documents once audited from such bidders anytime during the validity of the bid.**

**e.** Bidder shall have to submit valid Test Report of HLS as per MNRE technical specification from MNRE authorized, NABL accredited test centre along with technical bid, failing which the tender will be rejected.

**f.** Bidder who is debarred from business by Govt. /Govt. Agency in any state would not be eligible to participate in this bid. A self-declaration in prescribed format (as per **Annexure-VI**) should be submitted by the bidder to this effect, failing which bid shall be rejected.

**g.** Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- i. Made misleading or false representations in the forms, statements, affidavits and attachments submitted in proof of the qualification requirements; and/or
- ii. Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion litigation history, or financial failures etc; and/or
- iii. Participated in the previous bidding for the same work and had quoted unreasonably high or low bid prices and could not furnish rational justification for it to CREDA.



**2. BIDDING PROCESS-**

For ease of accessing the e-bidding website and registration the following is to be done by bidder -

- a. Visit <https://eproc.cgstate.gov.in>
- b. Prospective bidders are requested to download, read and understand the Manuals present on the website so as to clearly understand the bid submission process.
- c. The user will be directed to e-bidding page where all information regarding registration is available along with helpline details.
- d. Technical bid and Price Bid shall be submitted online only at <https://eproc.cgstate.gov.in> latest by **05.00 PM on 20.02.2024**. Bids submitted after scheduled time and date shall not be considered.

**3. EMD AND BID DOCUMENT FEE-**

- a. Earnest Money Deposit of ₹ 217500.00 & Document Fees of ₹11,800.00 shall be submitted in the form of Demand Draft/Pay Order or RTGS/NEFT as mentioned in the NIT vide no. **152278/CREDA-PMJANMAN/PVTG/SPVHLS/2023-24** Date: 31-01-2024, EMD submitted in any other form e.g. **Cash/Bank Guarantee/FDR/TDR etc. shall not be accepted.**
- b. The EMD shall be released to the bidder after successful completion of allocated work.

**4. SUBMISSION OF DOCUMENTS -**

- a. All the documents including technical and financial Bid should be submitted online on Chhattisgarh e-Procurement portal <https://eproc.cgstate.gov.in> as per the items mentioned in the Check list on page no.06 in this bid.
- b. Bidders are advised to finish all the bidding portal related activities such as registration, USB certificate/token approval, and payments etc. well in advance so as to avoid last minute difficulties during the bid submission.
- c. Bidders are also advised to make themselves fully aware with the bid submission mechanism to avoid last minute hassles and doubts during bid submission. CREDA shall only entertain genuine technical issues/glitches, provided that the bidder submits evidence regarding the same.
- d. Additionally, the bidders shall also have to submit all the documents, in original hard copy, as required in this bid as per the checklist on page 06 during the opening of technical bid. Bidders shall have to submit only the documents as per the checklist in the following envelopes.

**Envelope A** –Pre Qualification Documents (original DD should be submitted in this envelope)

**Envelope B** –Financial Qualification Documents (GST, PAN, Net worth, Turnover, ITR and Balance Sheet)

**Envelope C** –Technical Qualification Documents

**Note: The Envelopes mentioned above are only for submission sake only and must not be related with the Envelopes mentioned in the context of the checklist on page-06.** The documents submitted in hard copy (offline) before CREDA officials must match with those submitted in the Chhattisgarh e-Procurement portal. Any document other than the uploaded document shall not be considered. CREDA's tender committee will only evaluate the documents submitted on Chhattisgarh e-Procurement portal. **In no case the hard copy of documents shall be evaluated, they shall be only for record keeping by CREDA.**

**5. SPECIFICATION AMENDMENTS-**

- a. The Specifications of components of Solar Home Light System should be as per as scheme guideline released by Ministry of New and Renewable Energy (MNRE) vide Order F no. 32/71/2023SPV Division Dated 04/01/2024. If any amendments are issued by MNRE/MoP/CREDA in due course of time, in this context, then those shall be applicable under this Bid.
- b. CREDA reserves the right to amend or change minor specifications of the entire or any component of Solar Power Plant system even after the issuance of work order as per the site conditions.

**6. GST & PAN-**

Bidder shall have to submit copies of GST registration number and PAN numbers issued by the appropriate authority.

**7. THE BID-**

- a. The Pre-Qualification, Technical-Financial Qualification Documents, Price Bid and, other related documents must be uploaded in the portal i.e. <https://.eproc.cgstate.gov.in> from **31.01.2024 at 11:00 AM onward till 20.02.2024 up to 05:00 PM.**
- b. Nobody is authorized to receive or grant receipt for Bid delivered on behalf of CREDA. **Bid received through any other means shall not be considered and shall be rejected.**

**8. ANALYSIS OF RATE -**

Bidder should quote their rates considering variation of site conditions and all other factors in price of different components and keeping the quantum and quality of work in mind.

**9. REGISTRATION OF BIDDER-**

Bid shall be rejected of all those bidders who are not registered as System Integrator with CREDA at the time of submission of bid.

**10. VALIDITY-**

Full descriptive particulars and complete specifications should accompany the offer. Offers should be kept open for acceptance for at least **180 days** from the date of opening. After finalization of this Bid the approved rates shall be valid till two year from the date of award; however CREDA shall have liberty to increase or decrease this validity if needed.

**11. TERMS & CONDITIONS-**

- a. The terms, conditions and specifications mentioned in Bid document shall be binding on the Bidders and no condition or stipulation contrary to the conditions shall be acceptable. It may please be noted that the Bidders who do not accept terms and conditions stipulated in this Bid documents, their offers shall be liable to be rejected out-rightly without assigning any reason whatsoever.
- b. Each page of Bid document & enclosures shall be signed by the Bidder and seal affixed. All the pages of the documents issued must be submitted along with the technical offer. In case of any corrections /alterations in the Bid, the Bidder should attest the same; otherwise Bids may not be considered.
- c. Bidders are also instructed to submit their Bids in properly arranged manner (with index, proper paging and with flags on important documents). Incomplete, lose, conditional or improper arranged Bids will not be accepted.

**12. CREDA RESERVES THE RIGHT-**

- a. To reject or accept any or all Bids fully or partly without assigning any reason on the grounds considered advantageous to CREDA, whether it is the lowest Bid or not.
- b. To split the quantities against the Bid further for the same items/work, if required. No reason will be assigned by CREDA for this and will be binding on the Bidders.
- c. The sites and quantity are not limited to as mentioned in the list of the proposed sites on page No. 23-25, may change as per requirement. To increase or decrease of aggregate quantities/capacities as per discretion or circumstances, if required.
- d. Due to limitation of the time period for completion of the work CREDA may allocate work to more than one eligible bidder, if required, hence may take consent from other eligible Bidders if they agree to work on rates approved by CREDA.
- e. CREDA reserves the right to amend or change minor specifications of the entire or any

component of Solar Home Light system even after the issuance of work order as per the site conditions.

**13. COMMUNICATIONS -**

- a. All the communication between Bidder and CREDA shall be in writing. Notice sent by Fax or other Electronic means shall be effective on confirmation of the transmission. Notice sent by registered post or speed post shall be effective of delivery or at expiry of normal delivery period as under taken by Postal Service.
- b. Offers through Telegraph/Fax/Emails/Post/Courier or open offers etc. received shall be summarily rejected.

**14. BID DOCUMENT FEE AND EARNEST MONEY DEPOSIT-**

- a. Each Bidder should submit Bid Document Fee and earnest money in the form of Demand Draft/Pay Order or RTGS/NEFT. Each bidder should submit Tender Document Fee and Earnest M
- b. Deposit (EMD) in the form of RTGS/NEFT only as single transaction only as mentioned in the Bid No. **152278/CREDA-PMJANMAN/PVTG/SPVHLS/2023-24 Dated: 31.01.2024.**
- c. Tender Document Fee and EMD submitted in any other form e.g. Cash/Bank Guarantee/FDR/TDR etc. shall not be accepted.

**15. PRE-BID QUERIES SUBMISSION IN WRITING-**

- a. All suggestions, doubts, confusion, request, queries etc., shall have to be presented to CREDA in writing or through email to [credatendercell@gmail.com](mailto:credatendercell@gmail.com) on or before **07.02.2024 till 05:00 PM**. After that any representation in this regard shall not be considered.
- b. The purpose of pre-bid queries is to clarify issues and questions related to this Bid that can be raised at that stage. Any amendments in the bid documents which may become necessary as a result of pre-bid queries received shall be part of original Bid document and communicated through corrigendum on CREDA website [www.creda.co.in](http://www.creda.co.in) and on Chhattisgarh e-Procurement Portal <https://eproc.cgstate.gov.in>.

**16. TECHNICAL CRITERIA-**

The Bidder should have sufficient technically qualified and well-experienced manpower for execution of the project and after sales service of the systems. These details may be called by CREDA and in case there is any deficiency found the Bidder may be debarred.

**17. FORFEITURE OF EARNEST MONEY DEPOSIT-**

It should be clearly understood that in the event of Bidder failing to enter into the agreement in the prescribed format on their quoted rates and also fails to execute assigned works under any Scheme of CREDA, within stipulated time, if he is so communicated within the validity period of the offer, the full amount of earnest money will be forfeited and Bidder shall be debarred from future business with CREDA including future participation in bids up to three years. CREDA's decision in this regard will be final and binding on the Bidders.

**18. PRICE OF SUPPLY OF SOLAR HOME LIGHT SYSTEMS WITH INSTALLATION, COMMISSIONING AND TESTING -**

- a. The Price quoted for each of the solar home light systems should with 5 years Comprehensive maintenance contract (CMC) and onsite unconditional warranty. The GST shall be paid extra as per prevailing rate (the GST regulation notification no. 08/2021-Central tax (Rate) dated 30.09.2021). The prices shall be filled exactly as per **e-Price Bid enclosed.**
- b. Any change in GST shall be become applicable during the period of contract.
- c. In this regard if there is any change in the composition ratio of goods and services by any Authority/Courts, same shall be applicable.

d. **There shall be no escalation of rates under any circumstances.**

**19. ENGINEERING DOCUMENT-**

Successful Bidders will have to submit Engineering Documents with technical details, drawings, Specifications of components and make etc. to CREDA for approval, as and when asked by CREDA. Works may only be started out only after approval of the Engineering Document and their samples.

**20. COMPREHENSIVE MAINTENANCE CONTRACT (CMC) -**

Comprehensive Maintenance Contract of **5 years shall have two distinct components as described below-**

- a. **Preventive / Routine Maintenance:** This shall be done by the successful bidder on monthly basis regularly including activities such as cleaning and checking the health of the Solar home lighting system, cleaning of module surface, tightening of all electrical connections and any other activity that may be required for proper functioning of the Solar home lighting system as a whole.
- b. **Breakdown / Corrective maintenance:** Whenever a complaint is lodged by the user/CREDA or notice issued from CREDA, the successful bidder shall attend to the same within a reasonable period of time (not exceeding 03 days from the date of complaint) and rectify the defects, within specified period of time as maximum 07 days for minor replacement/repair and 15 days for major replacement/repair. In case of non-compliance of O&M works within time limit, CREDA will deduct 0.25% of systems cost per week for repair/rectification and after one month the bidder will be debarred and blacklisted. Replacement of the defective component/ spares, if required, as and when such requirement would arise. The replacement work shall be carried out within the specified time limit i.e. maximum 07 days for minor replacement/repair and 15 days for major replacement/repair. It is mandatory that the successful bidder shall submit a certificate, about the rectification/replacement work done, to the CREDA, failing which it will be assumed that the successful bidder has not performed its duties. Major and minor replacement/repair shall be defined by CREDA separately.

For carrying out the maintenance service during CMC effectively, the successful bidder shall establish one local service centre at respective district head quarter.

**Failure to adhere to the CMC guidelines (as on page no. 34) will result in penal action including debarring from participation in next tender.**

- c. **Facilities at the local Service Center:** The successful bidder shall maintain the following facilities at the Local Service Centre at district level for ensuring highest level of services to the end user, within the vicinity of installed solar home lighting systems:
  - i. Adequately trained manpower specifically trained by the successful bidder for carrying out the service activities.
  - ii. Sufficient spare parts, to extend services to keep the installed Solar Home lighting system operational smoothly.
- d. The successful bidder shall submit certificates of maintenance / monthly visits in the enclosed format (**Format A**) on page No. 34 to CREDA on monthly basis, along with the service reports.
- e. If the successful bidder fails to repair the systems against the complaints of breakdown /Corrective maintenance to ensure 100% working status during CMC period in stipulated period i.e. maximum 30 days, repair / replacement work will be done by CREDA from their SD or any other due payments available with CREDA.
- f. A detailed methodology stating the plan to undertake the work of Maintenance Contract, proposed network of service centers should be submitted by successful bidder at the time of Contract.

**21. SAMPLES –**

Samples of the Home light Systems and its components as per MNRE specifications shall have to be displayed at CREDA in prescribed manner for testing, verification purpose without any additional cost, failing which the bidder will be disqualified technically. If the

installed system against work order varies from technical specifications of the sample then the bidder may be debarred and blacklisted.

**22. INSPECTIONS -**

CREDA reserves right to inspect the material at Godowns/Temporary stores of successful bidder before dispatch and also at works sites.

**23. MANDATORY DEDUCTION -**

This deduction is One Percent of the cost of installation only and it is mandatory to deposit to labour welfare department as per state/central govt. norms. So while quoting the financial bid keep this in mind.

**24. CORRUPT OR FRAUDULENT PRACTICES -**

- a. CREDA requires the bidder to strictly observe the laws against fraud and corruption in force in India, namely, Prevention of Corruption Act, 1988.
- b. It is required that each bidder (including their respective officers, employees and sub-contractors) adhere to the highest ethical standards, and report to the Government/ Department all suspected acts of fraud or corruption or coercion or collusion of which it has knowledge or become aware, during the tendering process and throughout the negotiation or award of contract.

**25. MANDATORY EMPLOYMENT-**

Qualified diploma engineer with minimum wage rupees 15000/- per month for works above rupees 20 lacs and Qualified graduate engineer with minimum wage rupees 25000/- per month for works above rupees 01 crore shall have to be deployed by the Successful Bidder. (As per CG Govt.'s order no. F7-17/2020/1-6 Dated 02.12.2020)

**26. TAX OBLIGATIONS-**

CREDA shall deduct TDS for Income Tax, applicable cess on Civil Work etc. under various acts and deposited with the appropriate authority. Costs and taxes before execution of agreement with CREDA, so as to ensure tax deposition as per Government Rules accordingly.

**27. JURISDICTION OF THE COURT-**

Any dispute arising out of the contract shall be subject to the jurisdiction of Hon'ble High Court of Chhattisgarh.

**SECTION - 2**  
**GENERAL CONDITIONS OF CONTRACT**

**1. DEFINITIONS -**

In writing General Conditions of Contract, the specifications and bill of quantity, the following words shall have the meanings hereby indicated, unless there is something in the subject matter or content inconsistent with the subject.

- a. **CREDA** shall mean the Chhattisgarh State Renewable Energy Development Agency, Government of Chhattisgarh Undertaking, registered under society act 1973 working under the administrative control of Energy Department, Govt. of Chhattisgarh its office at Raipur (CG) represented through the Chief Engineer/Superintending Engineer.
- b. **Work** shall mean any work entrusted to the Bidder as mentioned in the scope of work and Work Order.
- c. The "**Engineer in charge**" shall mean the Engineer or Engineers authorized by CREDA for the purpose of this contract. Inspecting Authority shall mean any Engineering person or personnel authorized by CREDA to supervise and inspect the erection of the Solar Home Light System
- d. "**The Successful Bidder**" shall mean the Bidder awarded with the contract or their successors and permitted assigns.
- e. "**Contract Price**" shall mean the sum named in or calculated in accordance with the provisions of the contract as the contract price.
- f. "General Conditions" shall mean the General conditions of Contract.
- g. "**Specifications**" shall mean the specifications annexed to these General Conditions of contract and shall include the schedules and drawings attached thereto or issued to the successful bidder from time to time, as well as all samples and pattern, if any,
- h. "**Month**" shall mean calendar month.
- i. "Writing" shall include any manuscript, typewritten, printed or other statement reproduced in any visible form whether under seal or written by hand.

**2. PROOF OF MANUFACTURER-**

Those bidders who are also manufacturers of major component of SPV off-grid System such as SPV Modules, Charge Controller, Battery and Structures shall have to submit proof of their manufacturing unit and appropriate registration documents and list of Machineries and Equipment's.

**3. CONTRACT DOCUMENT-**

The term "Contract" shall mean and include the General conditions, specifications, schedules, drawings and Work Orders etc., issued against the contract schedule of price or their final general conditions, any special conditions applying to the particular contract specification and drawings and agreement to be entered into. Terms and conditions not herein defined shall have the same meaning as are assigned to them in the Indian contract Act or any other Act in vogue or by any person of common knowledge and prudence.

**4. MANNER OF EXECUTION-**

- a. Execution of work shall be carried out majorly under Scheme of PM-JANMAN and NEW SOLAR POWER SCHEME in an approved manner as outlined in the technical specifications specified by guideline /Notification of MoP/MNRE or where not outlined, in accordance with desired Specifications laid down by CREDA, to the reasonable satisfaction of the Engineer in charge.
- b. Successful Bidder / Bidder here-in-after called the **SI** (System Integrator).
  - i. After receipt of LOI from CREDA the eligible SI shall submit a plan to CREDA Head Office and respective Zonal Office regarding work execution and conduct a detailed survey of site and submit site clearance report in prescribed format after due verification and signatures of beneficiary to CREDA. All necessary documents and survey details duly verified by concerned ZO/RO shall have to be submitted to CREDA Head office in prescribed manner within 07 days from receipt of LOI.
  - ii. The eligible SI shall also submit detailed engineering drawings, documents and test reports to Engineer-in-Charge of CREDA.

- iii. Engineer-in-Charge of CREDA shall examine these reports.
  - iv. Superintending/Executive Engineer of Zonal/Regional Office CREDA will confirm the technical feasibility and layout plan of site taking due consent of beneficiary. Superintending/Executive Engineer may visit the site if he/she is not satisfied with survey report, as per tender norms.
  - v. After satisfaction Superintending/Executive Engineer Zonal/Regional Office, CREDA will forward the site clearance report with technical feasibility to Engineer-in-charge CREDA, Head Office, Raipur.
  - vi. Engineer-in-charge CREDA, Head Office, Raipur shall be final authority to approve or reject site finalization recommended by Zonal/Regional Office.
  - vii. Engineer-in-charge CREDA, Head Office, Raipur after his/her satisfaction, as per tender norms, shall issue work order.
  - viii. After issuance of Work Order(s), Superintending/Executive Engineer Zonal/Regional CREDA shall finally approve site layout in writing in prescribed format to eligible SI.
  - ix. The SI shall start work within 15 days after the receipt of Work Order else work order shall be treated as cancelled.
- c. All the materials required for the installation of Solar Home Light System as per Work Order issued shall be kept at site in the custody of the eligible SI. CREDA shall not be responsible for any loss or damage of any material during the installation.
  - d. All the electrical works should be done as per various provisions of Indian Electricity Act. The persons engaged for carrying out electrical works should have a valid **A-class** license or above issued by licensing board of Chhattisgarh.
  - e. After work is started, CREDA may carry out inspections at various stages at its discretion.
  - f. After installation, joint inspection shall be done in presence of eligible SI and CREDA and after successful commissioning of Solar Home Light System and its approval from CREDA, a JCC shall be signed and the necessary documents shall be forwarded to CREDA, as per guidelines and procedures of CREDA. Concern beneficiary should also sign the JCC, where ever required.
5. **VARIATIONS, ADDITIONS & OMISSIONS-**  
 CREDA shall have the right to alter, amend, omit, and split the terms & conditions and other contents of bid, by notice in writing to the eligible SI. The eligible SI shall carry out such variation in accordance with the rates specified in the contract so far as they may apply and where such rates are not available; those will be mutually agreed between CREDA and the eligible SI.
6. **INSPECTION-**
- a. The Engineer-in-Charge or his authorized representative(s) shall be entitled at all reasonable times to inspect and supervise and test during supply, installation and commissioning. Such inspection shall not relieve the eligible SI from their obligations under this contract.
  - b. Material can be inspected before dispatch or in transit by the authorized representatives of CREDA at the factory/godown at the cost of the eligible SI, if desired by CREDA.
  - c. CREDA will undertake real time performance and quality test of randomly selected components of solar home light systems during the course of execution as per the specifications and guidelines as per Section-4 of tender document to ensure quality and performance of solar home light systems and its components.
  - d. CREDA reserves the rights to inspect and supervise 100% works at sites.
  - e. Superintending Engineer from Zonal office shall inspect and supervise 15% of total systems installed in their respective Zone.
  - f. Executive Engineer from Regional office shall inspect and supervise 40% of total systems installed in their respective Region.
  - g. Assistant Engineer/District In-charge from District office shall inspect and supervise 100% of total systems installed in their respective District.
  - h. Work progress and documents/photographs of every stages of work shall be uploaded to the web-portal of CREDA through Mobile Application is mandatory for SI and field offices of CREDA.
  - i. Remote monitoring system shall be incorporated in the electronics of the Solar Home Lighting System and same shall be inspected by CREDA while physical inspection/monitoring of systems through Mobile Application.

**7. COMPLETION OF WORK-**

Time being the essence of contract, the installation of the Solar Home Light System shall have to be completed within 45 days from the issuance date of the work order including rainy season/harsh circumstances.

**8. SYSTEM INTEGRATOR'S LIABILITY IN CASE OF DEFAULT-**

CREDA may by written notice of default to the eligible SI, terminate the contract in circumstances detailed here under -

- a. If in the opinion of the CREDA, the eligible SI fails to complete the work within the time specified in the Work Order or within the period for which extension has been granted by CREDA to the eligible SI.
- b. If in the opinion of CREDA, the eligible SI fails to comply with any of the provisions of this contract.
- c. In the event of CREDA terminating the contract in whole or in part as provided in paragraph (a) above, CREDA reserves the right to recommend for engagement of another eligible SI or agency upon such terms and in such a manner as it may deem appropriate and the eligible SI shall be liable to CREDA for any additional costs or any losses caused to CREDA as may be required for the completion of erection of the Solar Home Light System and/or for penalty as defined under this Bid document until such reasonable time as may be required for the final completion of the work. CREDA may debar such a defaulter SI for up to three years from taking participation in taking part in all activities of CREDA.
- d. In the event CREDA does not terminate the contract as provided in paragraph (a) the eligible SI shall continue performance of the contract, in which case he shall be liable to CREDA for penalty for delay as set out in clause 15 until the work is completed.

**9. FORCE MAJEURE-**

The eligible SI shall not be liable for any penalty for delay or for failure to perform the contract for reasons of FORCE MAJEURE such as of God, acts of public, enemy, LWE problems, acts of government, cyclone, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes provided that if SI shall submit delay notice with appropriate cause of delay to the CREDA in writing within **15 days** of force majeure. CREDA shall verify the facts and may grant such extension as facts justify. Delay in supply of any accessories of solar home light system etc. by the related vendors, to whom the Bidder has placed order, shall also not be treated as force majeure.

**10. REJECTION OF WORKS -**

In the event of any of the material supplied/work done by the eligible SI is found defective in material or workman ship or otherwise not in conformity with the requirements of this contract specifications, CREDA shall either reject the material and/or work and advise the eligible SI to rectify the same. **CREDA may impose penalty for such rejection up to the 200% cost of the entire system. Habitual/repeated offenders shall be black listed/debarred to participate in the any Bid/ Activity of CREDA till further orders.** The eligible SI on receipt of such notices shall rectify or replace the defective material and rectify the work free of cost. If the eligible SI fails to do so CREDA may-

- a. At its option replace or rectify such defective materials and/or work and recover the extra cost so involved from the eligible SI plus **15%** service charges of the cost of such rectification, from the eligible SI and/ or terminate the contract for balance work/ supplies with enforcement of penalty as stated above.
- b. Defective materials/workmanship will not be accepted under any conditions and shall be rejected outright without compensation. The eligible SI shall be liable for any loss/damage sustained by CREDA due to defective work with enforcement of penalty as stated above.

**11. EXTENSION OF THE TIME-**

If the completion of installation is delayed due to any reason beyond the control of the eligible SI, the eligible SI shall without delay give notice to the CREDA in writing of his claim for an extension of time. CREDA on receipt of such notice may or may not agree to extend the contract/delivery date of the Solar Home Light System as may be reasonable but without prejudice to other terms and conditions of the contract. CREDA has full right for unconditional time extension.



**12. MAKES OF EQUIPMENTS TO BE USED IN THE WORK-**

- a. The Solar Modules, Charge Controller, Battery, DC/AC Junction boxes with isolators & Other BOS should be as per BIS/IEC/CE/IES standards.
- b. The eligible SI has to ensure that equipment's are as per Technical Requirements of guidelines of MNRE/MoP/MoTA as complied with. The material/works for which MNRE or BIS or ISI specification is not available, engineer-in-charge of the works will examine and approve the material/works, preferably of all makes on which CREDA has report of satisfactory performance.
- c. Manufacturer Authorization Form (MAF) on Manufacturer's Letter head of Solar Modules, Charge Controller, Battery, DC/AC Junction boxes with isolators & Other BOS, which the SI is intending to use in the installation, shall be submitted with technical bid.

**13. WARRANTEE PERIOD AND POST INSTALLATION SERVICES-**

The work done/material supplied by the eligible SI should be warranted for satisfactory operation and against any defect in material and workmanship and Structures and other balance of equipment, at least for a period of 5 (five) years, from the date of commissioning of the Solar Home Light System & other works as per scope of work.

- a. Warrantee on SPV Modules shall be for **10 (ten) years** through successful bidder from the date of commissioning of the Solar Home Light Systems must be warranted for their output peak watt capacity, which should not be less than **90%** at the end of **10 years** and not less than **80%** at the end of **25 years**.
- b. The above warrantee certificates shall be furnished to the CREDA for approval. Any defect noticed during this period should be rectified by the eligible SIs free of cost upon written notice from CREDA provided such defects may be due to bad workmanship or bad materials used.
- c. **The warrantee period shall be extended by the period during which the Solar Home Lighting system remains non-operative due to reasons within control of the eligible SIs. The warrantee period extension shall be done by CREDA, if required.**
- d. This warrantee must be an unconditional onsite warrantee and the eligible SI will have to replace the defective material within **07 days** positively from the date of information given to him by CREDA.
- e. Care should necessarily be taken to make the Solar Home Light Systems operational, once the reporting of the fault/non-operational status is done, within 5 days. If the Solar Home Light System is not made operational within **07 days**, CREDA may rectify the same at the cost of SI and the warrantee period shall be extended accordingly for delay period.

**14.** System Integrators shall have to establish their service station at as mention on the clause No. 20(c) of Section-1 and shall have to keep sufficient quantity of spares and man power to ensure proper service network for taking care of smooth functioning of Solar Home Light System installed by them.

**15. TERMS OF PAYMENT-**

- a. 90% of the cost of value of the supply, installation & commissioning of the Solar Home Lighting system (including GST) after successful installation & commissioning and submission of JCC in hard copy, after recommendation from Zonal/Regional/District office of CREDA after allocated fund received from Implementing agency/Central/State Govt..
- b. Balance 5% of eligible payment (including GST) after one year of successful functioning of the Solar Home Lighting system.
- c. Balance 5% of the eligible payment including GST i.e. **Security Deposit** shall be released by CREDA after successful completion of CMC for a period of **60 Months** from the date of successful installation & commissioning.
- d. Payment for Comprehensive Maintenance Contract (CMC) shall be paid every quarter (3 months) from the Date of Commissioning till the end of 60<sup>th</sup> month, on submission of CMC report to CREDA in the prescribed format.

**16. PENALTY FOR DELAY IN COMPLETION OF CONTRACT-**

- a. If the eligible SI fails to complete the assigned work within the schedule time specified in the Work Order or any extension granted there to, CREDA will recover from the SI as penalty of up to **One percent (1%)** per week of the system price excluding GST for every delayed system. For this purpose, the date of commissioning shall be reckoned as the date of completion. The total penalty shall not exceed **10% (Ten Percent)** of the cost. The eligible SI shall not be liable for any penalty for delay or for failure to perform the contract for reasons of FORCE MAJEURE.
- b. Review of the progress of installation of Solar Home Lighting system allocated to SI shall be done from time to time by CREDA and if the progress of installation is found unsatisfactory, CREDA shall allocate of entire remaining uninstalled system or their part of can be re-allocated to other SI as per discretion of CREDA.

**17. SECURITY DEPOSIT (SD)-**

- a. The Earnest Money shall be retained by CREDA up to the duration of validity of Tender, after Agreement is done to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be required by CREDA.
- b. Beside this, **5%** of the cost shall also be retained by CREDA as SD during the five years of warrantee period. No interest shall be payable on the SD.
- c. Period for which EMD and SD are to be retained may be extended in case the warrantee period is extended due to nonperformance of the system.
- d. All costs of damages and delays for which the eligible SI is liable to the CREDA will be deducted from any money due to the eligible SI including the security deposit of project under.

**18. INSURANCE-**

The eligible SI shall arrange insurance coverage for the materials and Solar Home Light System at his/beneficiary's custody for the work under execution and successful commissioning and subsequent handover to the beneficiary. The eligible SI shall take up insurance or such other measures for the manpower so as to cover the claim for damage/accident under workmen's compensation Act and other applicable State/Central laws. CREDA shall not bear any responsibility on this account.

**19. PENALTY DUE FROM THE ELIGIBLE SI-**

All costs of damages and delays for which the eligible SI is liable to the CREDA will be deducted from any money due to the eligible SI including the security deposit of project under CREDA.

**20. RESPONSIBILITY OF ELIGIBLE SI-**

Notwithstanding anything mentioned in the specifications of subsequent approval or acceptance of the Solar Home Lighting system by CREDA, if any, the ultimate responsibility for satisfactory performance of the entrusted work shall rest with the eligible SI. If in any case the eligible SI does not complete the work as per the Work Orders issued to them then CREDA may take over the task & complete the project at the risk and cost of eligible SI.

**21. RESPONSIBILITY TO RECTIFY THE LOSS AND DAMAGE-**

If any loss or damage occurs to the work or any part thereof or materials/plant/equipment's for incorporation therein the period for which the eligible SI is responsible for the cause thereof or from any cause whatsoever, the eligible SI shall at his own cost rectify/replace such loss or damage, so that the permanent work confirms in every respect with the provision of the contract to the satisfaction of the Engineer in charge. The eligible SI shall also be liable for any loss or damage to the work/equipment's occasioned by him in course of any operation carried out to him during performing the contract.

**22. RESPONSIBILITY TOWARDS THE WORKMAN OR OUT SIDERS-**

- a. **The eligible SI shall have to take insurance coverage from any authorized Insurance Company against Workmen Compensation due under Workmen Compensation Act and submit copy of the insurance document before issuance of Work Order.**
- b. The eligible SI shall ensure all safety measures during execution and repairs of the work. CREDA, will, in no case be responsible for any accident fatal or non-fatal, caused to any workman or outsider in course of transport or execution or repairs of work.
- c. All the expenditure including treatment or compensation will be entirely borne by the eligible SIs. The eligible SI shall also be responsible for any claims of the workers

including, labor payments PF, Accidental Insurance, Gratuity, ESI & other legal obligations.

- d. CREDA shall have all rights to deduct such claims of payments from SI in case of complaints of such violations.

**23. NON-ASSIGNMENTS-**

The eligible bidder shall not assign or transfer the work orders issued as per this contract or any part thereof.

**24. CERTIFICATES NOT TO AFFECT RIGHTS OF CREDA-**

The issuance of any certificate by CREDA or any extension of time granted by CREDA shall not prejudice the rights of CREDA in terms of the contract nor shall they relieve the eligible SI of his obligations for due performance of the contract.

**25. SETTLEMENT OF DISPUTES THROUGH ARBITRATION-**

- a. Except as otherwise specifically provided in the contract, all disputes concerning questions of fact arising under the contract shall be decided by the CREDA provided a written appeal by the eligible SI is made to CREDA. The decision of the CREDA shall be final and binding to the all concerns.
- b. Any dispute or difference including those considered as such by only of the parties arising out of or in connection with the contract shall be to the extent possible be settled amicably between the parties. If amicable settlement cannot be reached then all disputed issues shall be settled by arbitration at Chhattisgarh.

**26. LAWS GOVERNING CONTRACT-**

The contract shall be constituted according to and subject to the Laws of India and jurisdiction of the High Court of Bilaspur, Chhattisgarh.

**27. LANGUAGE AND MEASURES-**

All documents pertaining to the Contract including specifications, schedules, notice correspondences, operating and maintenance instructions, drawings or any other writings shall be written in English / Hindi language. The metric system of measurement shall be used in this contract.

**28. CORRESPONDENCE-**

- a. Any notice to the eligible SI under the terms of the contract shall be served by registered mail to the registered office of the eligible SI or by hand to the authorized local representative of the eligible SI and copy by post to the eligible SI's principal place of business.
- b. Any notice to CREDA shall be served to the CREDA Head Office Raipur in the same manner.

**29. SECRECY-**

The eligible SI shall treat the details of the specifications and other documents as private and confidential and they shall not be reproduced without written authorization from CREDA.

**30. AGREEMENT-**

The successful eligible SI shall have to enter into a agreement with the CREDA in the approved contract agreement form within **10 days** of the receipt of call from CREDA.

**31. DECLARATION OF CONFLICT OF INTEREST-**

- a. Any regular employee working or worked on basis of contract or through placement agency cannot work directly or indirectly in any scheme of CREDA. If such a person is found working with any SI or through sublet then, such SI shall be blacklisted for three years.
- b. The bidder shall not be permitted to Bid for the work if the section of Head Office CREDA (responsible for implementation of work) in which his/her near relative is posted. The bidder shall also intimate the names of his near relatives working in CREDA. Bidder shall also intimate the name of persons who are working with him in any capacity and who are near relatives to any employee in CREDA. Any breach of this condition by SI would render himself liable to be blacklisted for three years and removed from approved list of SIs in CREDA.

**Note-** By the term near relatives are meant Wife, Husband, Parents and Son, Brother, Sister, Brother-in-law, Father-in-law, and Mother-in-law etc.

- c. Bidder must produce an affidavit (**Annexure-II**) stating the names of retired/removed employee of CREDA (if any) in his/her employment who retired /removed within last two years, if in case there is no such person in his employment, his affidavit should clearly state this fact. **This affidavit is mandatory, if it is not produced along with the bid, the bid shall be rejected.**

**32. BID EVALUATION CRITERIA-**

- a. Offers of only those bidders, who are found qualified based on Eligibility Criteria and Technical Bid, will be taken into further consideration and financial bid of only those bidders who are qualifying the criteria of Technical Bid will be opened.
- b. Other things being equal, the lowest rates shall normally be preferred, but CREDA shall have rights and liberty to amend/lower the rates.
- c. Conditional Bids shall not be accepted.
- d. CREDA shall have rights and liberty to call any/other parties who are technically qualified but not accepted to work on approved rates, as and when required in accordance with quantum of work and scheduled time limits for completion of projects.

**33. EVALUATION OF PRICE BID-**

Price bid shall be evaluated on the basis of quoted rates. L1 rate i.e. lowest rate of total of Supply and Installation & Commissioning cost of Solar Home Lighting System shall be considered, however CREDA shall have discretionary power to amend/lower the rates.

**34. ALLOCATION OF WORK-**

- a. Preference shall be given to L1 Bidder in any or all district of Chhattisgarh State for allocation of works.
- b. CREDA reserves all rights for allocation of works and the decision of CREDA shall be final and binding.
- c. Review of the progress of installation of Solar Home Lighting System allocated to SIs shall be done time to time by CREDA and if the progress of installation is found unsatisfactory, the allocation of entire remaining uninstalled System or their part of can be re-allocated to other SI as per discretion of CREDA.

**35. BID REJECTION-**

**If financial bid of a bidder has been opened on the basis of technical bid of a bidder which has been determined to be substantially responsive to the bidding document and in latter stage it is found that bidder does not meet the eligibility criteria or the technical bid is found substantially non-responsive, CREDA reserves rights to reject such bid of a bidder anytime.**

**We (on behalf of Eligible SI/Bidder) have read all the above stated details & accept to comply with it in total.**

(Name, Signature & Seal of the SI)

### SECTION – 3 SCOPE OF WORK

The scope of work in brief will be as follows-

1. Survey of site, designing, supply, installation & commissioning of Solar Home Light System systems as per design and specifications approved by CREDA, on turnkey basis. Bidder shall have to take approval of the engineering documents, Bill of Materials and samples from CREDA prior to commencement of the work. 5 years Comprehensive maintenance contract (CMC) and 5 years onsite unconditional warranty against manufacturing defects shall be required for each of the system after successful commissioning and proper handing over.
2. The scope of work shall also include the followings:
  - a) Submission of site clearance certificate after survey (in the prescribed format) where the Solar Home Light Systems are proposed to be installed. A layout plan of the site should also be submitted clearly indicating the identified location for installation of SPV Modules, Structures and other components are proposed to be installed.
  - b) Detailed planning of time bound smooth execution of project.
  - c) Design, supply, installation & commissioning of Solar Home Light System of capacity of 300Wp as per design and specifications approved by CREDA, on turnkey basis.
  - d) Get technical and safety clearances from appropriate agency.
  - e) The bidder shall run the system on trial basis and shall closely monitor the performance of the system before handing over the system, so that the assured smooth operation can be estimated for monitoring of the performance of the system.
  - f) Bidder shall have to submit JCCs within 15 days of Installation and Commissioning of Solar Home Light System in concern Zonal/Regional/District office of CREDA.
  - g) Providing User Manuals, necessary tool kit, safety tools and Warrantee Cards to beneficiary. Bidder shall furnish all necessary information to beneficiary for Solar Home Light System Warrantee, Do & Don'ts etc. so as to avoid further misunderstandings and disputes.
  - h) Unconditional onsite warrantee for manufacturing defects for Five years faultless operation, assure required inventory for maintenance.
  - i) Providing Prompt Service Facilities to customers/ beneficiaries.
  - j) Risk liability of all personnel associated with implementation and realization of the project.
  - k) Training of beneficiary, on the various aspects of design and maintenance of the offered system after commissioning of the system.
  - l) The eligible bidder shall maintain sufficient inventory of the spares, at site, to ensure that the system can be made functional within 7 days from the communication of breakdown of the system during currency of the warrantee period.
  - m) Remote monitoring system shall be incorporated in the electronics of the Solar Home Lighting System and same shall be inspected by CREDA while physical inspection/monitoring of systems through Mobile Application.

**List of Proposed Site:**

<b>SN</b>	<b>District</b>	<b>Block</b>	<b>Village</b>	<b>Census Code</b>	<b>Name of PVTG Habitations</b>	<b>No. of Proposed Solar Home Lighting Systems</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1	Raigarh	Udaipur (Dharamjaigarh)	Kumhichuwan	434385	Chikhlapani	27

SN	District	Block	Village	Census Code	Name of PVTG Habitations	No. of Proposed Solar Home Lighting Systems
1	Bilaspur	Kota	Sargod	437498	Sargod	13
2	Bilaspur	Kota	Jhingatpur	437998	Chikhladabri	9
3	Bilaspur	Kota	Khairjhiti	438038	Khairjhiti	1
	Total					23

<b>SN</b>	<b>District</b>	<b>Block</b>	<b>Village</b>	<b>Census Code</b>	<b>Name of PVTG Habitations</b>	<b>No. of Proposed Solar Home Lighting Systems</b>
1	Mungeli	Lormi	Jakad Bandha	437890	Surhi	3
2	Mungeli	Lormi	Chakda	1962	Chakda	12
3	Mungeli	Lormi	Bansajhal	438014	Bisouni	5
4	Mungeli	Lormi	Bansajhal	438014	Dagniya	5
5	Mungeli	Lormi	Bansajhal	438014	Bijrakachhar	5
6	Mungeli	Lormi	Bansajhal	438014	Mahamai Shantipur	6
7	Mungeli	Lormi	Bansajhal	438014	Atriyakhar	2
8	Mungeli	Lormi	Bansajhal	438014	Niwaskhar	7
9	Mungeli	Lormi	Bansajhal	438015	Lamni	15
10	Mungeli	Lormi	Bansajhal	438014	Chirhatta	3
11	Mungeli	Lormi	Patparha	1962	Pataprha	2
12	Mungeli	Lormi	Bansajhal	438014	Ranjki	2
13	Mungeli	Lormi	Bansajhal	438014	Tilaidabra	1
14	Mungeli	Lormi	Bansajhal	438014	Sivalkhar	3
15	Mungeli	Lormi	Birarpani	1962	Birarpani	3
16	Mungeli	Lormi	Bansajhal	438014	Sarasdol	1
17	Mungeli	Lormi	Bansajhal	438014	Boirha	20
18	Mungeli	Lormi	Bansajhal	437692	Kodwamahant	4
19	Mungeli	Lormi	Salgi	1962	Salgi	13
20	Mungeli	Lormi	Katami	494226	Bamni	2
21	Mungeli	Lormi	Chhparwa	450991	Chhparwa	3
22	Mungeli	Lormi	Khudiya	495115	Jamunahi	1
	<b>Total</b>					<b>118</b>



<b>SN</b>	<b>District</b>	<b>Block</b>	<b>Village</b>	<b>Census Code</b>	<b>Name of PVTG Habitations</b>	<b>No. of Proposed Solar Home Lighting Systems</b>
1	GPM	Pendra Road Gorella	Dungra	437498	Banghat	19
2	GPM	Pendra Road Gorella	Andhiyarkhoh	437441	Semraha	5
	Total					24

<b>SN</b>	<b>District</b>	<b>Block</b>	<b>Village</b>	<b>Census Code</b>	<b>Name of PVTG Habitations</b>	<b>No. of Proposed Solar Home Lighting Systems</b>
1	Koriya	Khadgawan	Bhukbhuki	801916	Baigapara	19
	Total					19

SN	District	Block	Village	Census Code	Name of PVTG Habitations	No. of Proposed Solar Home Lighting Systems
1	Jashpur	Manora	Dongjharan	433950	Birnidhab	3
2	Jashpur	Manora	Gidha	433882	Bandkona A	5
3	Jashpur	Manora	Kardana	433938	Dakakona	10
4	Jashpur	Manora	Remne	433919	Korwa Basti	7
5	Jashpur	Manora	Remne	433919	Bhurughat	6
6	Jashpur	Bagicha	Ratba	3255	Pahadtoli Ratba	10
7	Jashpur	Bagicha	Dhodharamba	433704	Duhduhkona	43
8	Jashpur	Bagicha	Mahanai	433586	Haraiya	4
9	Jashpur	Bagicha	Sardih	433670	Chhindpani	17
10	Jashpur	Bagicha	Sulesha	433587	Tund Dand. Gajaitolo	10
	Total					115

<b>SN</b>	<b>District</b>	<b>Block</b>	<b>Village</b>	<b>Census Code</b>	<b>Name of PVTG Habitations</b>	<b>No. of Proposed Solar Home Lighting Systems</b>
1	Kondagaon	Keshkal	Kosmi	448607	Chanabharri	8
	Total					8

SN	District	Block	Village	Census Code	Name of PVTG Habitations	No. of Proposed Solar Home Lighting Systems
1	Rajnandgaon	Chhuikhadan (KCG)	Rangakhar	440062	Rengakhar Ward N.14	2
2	Rajnandgaon	Chhuikhadan (KCG)	Bandhatola	440052	Bandhatola,Warda N.17	3
3	Rajnandgaon	Chhuikhadan (KCG)	Singarpur	440090	Baiga Para	3
4	Rajnandgaon	Chhuikhadan (KCG)	Bhathli	440067	Bhadhli	1
5	Rajnandgaon	Chhuikhadan (KCG)	Hathijhola Kalan	440222	Nijamdih	9
6	Rajnandgaon	Chhuikhadan (KCG)	Marka Tola	440234	Sanjari	1
	Total					19

SN	District	Block	Village	Census Code	Name of PVTG Habitations	No. of Proposed Solar Home Lighting Systems
1	Balrampur	Balrampur	kanda	431981	Kanda	3
2	Balrampur	Samri(kusmi)	Magaji	432307	Jarhadand	2
3	Balrampur	Shankargarh	Kothali	432488	Bhalupani Kothali (OG)	5
4	Balrampur	Shankargarh	Pondi Khurd	432425	(UTRAPATH)OG Vinayakpur	5
5	Balrampur	Balrampur	kanda	431981	Asnatalla	3
	Total					18

SN	District	Block	Village	Census Code	Name of PVTG Habitations	No. of Proposed Solar Home Lighting Systems
1	Korba	Poundi-Uproda	Lalpur	436075	Kharkapara, Therriaama	3
2	Korba	Korba	Lemroo	436304	Manjurkharwan	2
3	Korba	Pali	Shivpur	436191	Birhor Mohalla- Shanti Nagar	4
4	Korba	Pali	Potapani	436162	Nawadih	3
5	Korba	Pali	Donganala	1962	Jangal Para	4
6	Korba	Korba	Kerakachhar	436402	Sardih	5
7	Korba	Poundi-Uproda	Bhula Jheriya	436071	Samelibhata	4
8	Korba	Korba	Nakiya	517300	Kamhun	9
	Total					34

<b>SN</b>	<b>District</b>	<b>Block</b>	<b>Village</b>	<b>Census Code</b>	<b>Name of PVTG Habitations</b>	<b>No. of Proposed Solar Home Lighting Systems</b>
1	Kanker	Koyalibeda	Tadvali	448400	Tekameta	22
	Total					22



SN	District	Block	Village	Census Code	Name of PVTG Habitations	No. of Proposed Solar Home Lighting Systems
1	Kabeerdham	Bodla	Kandapara	439307	Sajatola	4
2	Kabeerdham	Bodla	Rabda	439225	Rabda	13
3	Kabeerdham	Pandariya	Badaura	439837	Badaura	18
4	Kabeerdham	Bodla	Barbhanwar	439487	Barbhanvar	5
5	Kabeerdham	Pandariya	Chhirha	439835	Mathpur	6
	Total					46

<b>SN</b>	<b>District</b>	<b>Block</b>	<b>Village</b>	<b>Census Code</b>	<b>Name of PVTG Habitations</b>	<b>No. of Proposed Solar Home Lighting Systems</b>
1	Dhamtari	Nagri	Rajpur	447225	Rajpur	4
2	Dhamtari	Nagri	Barpadar	447329	Barpadar	4
	Total					8

SN	District	Block	Village	Census Code	Name of PVTG Habitations	No. of Proposed Solar Home Lighting Systems
1	Surguja	Ambikapur	Pampapur		PUMPAPUR Gajarbhawna	32
2	Surguja	Batouli	Bansajhal	433487	Amapani	22
3	Surguja	Batouli	Ghoghra	433493	Parsadhab	13
4	Surguja	Batouli	Kardana	433534	Kardana	14
5	Surguja	Batouli	Nakna	433505	Pahadpara	18
6	Surguja	Batouli	Sarmana	433501	Koilardhodhi	15
7	Surguja	Lundra	Chitarpur	433346	Cheurpani	16
8	Surguja	Lundra	Gersa	433427	Chitalata	14
9	Surguja	Lundra	Jarakela	433430	Chiurpani	23
10	Surguja	Mainpat	Karamha	433538	Korwapara	7
11	Surguja	Mainpat	Kot	433561	Gattikona	22
12	Surguja	Mainpat	Sapnadar	433557	Kerajobla	3
13	Surguja	Mainpat	Supalga	433539	Hasiyakhar	4
14	Surguja	Sitapur	Rajpuri	433460	Dumberpani	3
15	Surguja	Sitapur	Rajpuri	433460	Kudhrapani	12
16	Surguja	Sitapur	Rajpuri	433460	Pakerdhab	7
17	Surguja	Sitapur	Rajpuri	433460	Bijlichattan	1
	Total					226

<b>SN</b>	<b>District</b>	<b>Block</b>	<b>Village</b>	<b>Census Code</b>	<b>Name of PVTG Habitations</b>	<b>No. of Proposed Solar Home Lighting Systems</b>
1	Gariaband	Bindranavagarh	Kamarbhaundi	445032	Kamarpara Bhoudi	3
2	Gariaband	Bindranavagarh	Nagarar	445176	Nagrar	15
3	Gariaband	Bindranavagarh	Amamora	445177	Amamora Kamar Para	6
4	Gariaband	Bindranavagarh	Kukrar	445178	Kamar Para Kukrar	6
5	Gariaband	Bindranavagarh	Hathodadih	445184	Hathodadih	11
6	Gariaband	Bindranavagarh	Amlor	445205	Amlor	3
7	Gariaband	Mainpur	Naripani	445373	Naripani	3
8	Gariaband	Mainpur	Naripani	445373	Kawarama	7
9	Gariaband	Mainpur	Jugad	445382	Purana Basti	6
10	Gariaband	Mainpur	Dumaghat	445493	Bondajholpara	5
11	Gariaband	Mainpur	Dumaghat	445493	Kantasemhalpara	2
12	Gariaband	Mainpur	Dumaghat	445493	Ratakhhalpara	6
13	Gariaband	Mainpur	Kulhadighat	445368	Bhaludiggi	3
14	Gariaband	Mainpur	Kulhadighat	445368	Tarajhar	9
15	Gariaband	Bindranavagarh	Bhaisamuda	1962	Bhaisamuda	6
	<b>Total</b>					<b>91</b>

SN	District	Block	Village	Census Code	Name of PVTG Habitations	No. of Proposed Solar Home Lighting Systems
1	Narayanpur	Orchha	Kondakoti	449980	Uregudam	9
2	Narayanpur	Narayanpur	Narayanpur (NP)	802066	Tadnar	11
3	Narayanpur	Orchha	Kondakoti	449980	Gurmanjur	2
4	Narayanpur	Orchha	Kondakoti	449980	Ranimarka	1
5	Narayanpur	Orchha	Kondakoti	449980	À¤•À¥(À¤_À¤¼À¤¹À¥,À¤ ¤°	16
6	Narayanpur	Narayanpur	Narayanpur (NP)	802066	Kongali	11
	<b>Total</b>					<b>50</b>
	<b>Grand Total</b>					<b>848</b>

**SECTION – 4**  
**TECHNICAL SPECIFICATIONS**

**DEFINITION OF WHITE-LED (W-LED) BASED SOLAR HOME LIGHTING SYSTEM**

A solar home lighting system (SHLS) provides a comfortable level of illumination in one or more rooms of house. The HLS consist of a PV modules, control electronics, Lithium Ion battery and luminaries. There are several HLS model featuring one, two, or four luminary based on White Light Emitting Diode (W-LED). The system could also be used to run a fan (Permanent Magnet Brush Less Direct Current (PM BLDC)) and a 12-V DC television along with the W-LED Lamps with Remote Monitoring System (RMS) to ensure proper functioning and maintenance.

PV module converts sunlight into electricity, which powers the luminaries. White Light Emitting Diode (W-LED) is a solid states device which emits light when electric current passes through it.

**SPECIFICATIONFOR THE SOLAR HOME LIGHTING SYSTEM (SHLS)**

S.No.	Parameters	Specifications
1	SPV Module (with module mounting structure)	SPV Module - Minimum 300Wp under standard test condition (STC) Only indigenous module with minimum efficiency of 19 percent
2	Battery	<b>LFP Battery</b> Lithium Ferro Phosphate (LFP) – 1250Wh (minimum) Maximum Depth of Discharge 90% with more than 2000 cycle
3	Solar DC Charge Controller	MPPT
4	Appliances	(a) 5X7W DC LED Bulb (b) 1X20W DC Table/Pedestal Fan (PM BLDC) based on user requirement (c) 1 X30W Socket for DC appliance like TV (d) One USB Port for mobile charging,
5	Average Load Cycle and Battery Autonomy	6-7 Hours/day and two days respectively
6	Remote Monitoring System (RMS)	RMS for getting operational data on portal
7	Balance of Plant	Internal wiring with conduit, Switches, Socket etc.

**SPV MODULE**

**Specifications of SPV Modules**

1.1 Type and Quality

The PV module should have crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II / BIS 14286 from an NABL or IECQ accredited Laboratory. The capacity should be minimum 300Wp Multi/Mono Crystalline/MNRE approved solar modules with 72 cells with minimum 19% Module Efficiency. The modules should be tested and certified by a Govt. of India authorized test centers or should conform to relevant IEC/BIS standard as per MNRE guidelines. Offered module shall have a power discharge warranty of 90% of the rated power for 10 years. The rated discharge power and efficiency of any supplied module shall not be less than the specified power rating and efficiency of the modules, in any case. Every module should have suitable by-pass diode at its terminal box. The SPV Modules must be installed in such a way so as to deliver proper voltage and current to ensure desired power discharge as per

specifications of CREDA for the size of Solar Home Lighting System to be ordered. Modules with Cut Cells shall not be permitted. Indigenously manufactured PV module should only be used. The terminal box on the module should have a provision for opening it for replacing the cable, if required.

1.2 The modules used shall have following specifications:

- Type : Mono crystalline/ Multi crystalline/  
MNRE approved Solar Modules
- Specification and standard : Confirming to Prevailing MNRE guidelines

1.3 The PV modules must conform to the latest edition of any or all of the following IEC/ equivalent BIS Standards for PV module design qualification and type approval:-

<b>Solar PV Modules/Panels</b>	
IEC 61215/ IS14286	Design Qualification and Type Approval for Crystalline Silicon Terrestrial Photovoltaic (PV) Modules
IEC 61853- Part 1:2011/ IS 16170: Part 1:2014	Photovoltaic (PV) module performance testing and energy rating -: Irradiance and temperature performance measurements, and power rating
IEC 61730-1,2	Photovoltaic (PV) Module Safety Qualification – Part 1:Requirements for Construction, Part 2: Requirements for Testing

**1.4 IDENTIFICATION AND TRACEABILITY –**

Each PV module must use a RF identification tag (RFID), which must contain the following information:

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

Moreover there should be a Name Plate fixed inside the module which will give:

- a. Name of the manufacturer or Distinctive Logo.
- b. Name of the Scheme (PM-JANMAN)
- c. Name of SNA i.e. CREDA
- d. Model Number
- e. Unique Serial Number
- f. Year of Manufacture
- g. A distinctive serial number starting with NSM will be engraved on the frame of the modules or screen printed on the tedlar sheet of the module.

**The RFID must be inside of module lamination. The module laminate, but must be able to withstand harsh environmental conditions.**

1.5 The panel should be supplied with CREDA Logo in the form of sticker on the back of SPV panel or duly laminated inside the glass of solar module with the remark "Manufactured for CREDA". Inter connections of solar modules should be through good quality male female joint. Name of manufacturer, S. No. of Module & manufacturing year should be clearly fixed inside the glass lamination of every module. Back label should be affixed behind every module which should clearly state the specifications & capacity of the module.

1.6 **The size of Module Frame and the thickness of Glass, Back Sheet and EVA Sheet must be of the maximum size with only positive tolerance of applicable IEC standards. Modules should be of indigenous make and the efficiency of SPV Modules must be above 19 %.**

The total capacity of the Solar Photovoltaic array mentioned in the Rate Sheets is the minimum capacity in wattage of the total SPV modules to be installed in the SPV Home Lighting System.

1.7 **PID Test-** SPV Modules must pass PID (Potential Induced Degradation) Test as per norms of MNRE.

**2. Mechanical Components: MODULE MOUNTING POLE (MMP):**

MMP as per drawings should be installed along with the hot dipped galvanized (minimum 80 microns) pole for mounting of SPV modules at site. The panel frame structure should be capable of withstanding a minimum wind load of 150 Km per hour, after grouting and installation. MMP should be sturdy & designed to assist SPV Modules to render maximum discharge. The hardware (fasteners) used for installation of SPV Modules & MMP should be of suitable Stainless Steel (SS 304). Each module should be fastened by theft proof nut built.

Module Mounting Pole should have theft proof arrangements with the use of GI Steel C-channel along with the array support structure for locking arrangement of SPV modules for protecting them from theft. Its size should be with reference to the specifications of the SPV modules such that modules can comfortably slide in the channel while installation. It should not hide any portion of the photovoltaic circuit encapsulated in the lamination of the SPV module, there by un-affecting the efficiency & rating of the SPV modules. Anti-Theft Nut Bolts of SS (with washers) should also be used for better theft proofing along with "C" Channel MMS.

**BATTERY**

**Lithium Iron Phosphate Batteries (LFP)**

- i. The battery will have a minimum capacity of 1250 Wh.
- ii. Minimum 90% of the rated capacity of the battery should be between fully charged and load cut off conditions.
- iii. Lithium Iron Phosphate Rechargeable batteries should be only used.
- iv. The nominal voltage of the battery should be 25.6V
- v. The battery must have more than 2000 charge cycles at 90% Depth of discharge.
- vi. Self-discharge should be less than 2% per month.
- vii. The following are the details of the Battery Management System (BMS) for the Battery:
  1. The BMS should be a 4S PCM Protection
  2. Protections like BMS Protection:
    - a. Overcharge protection
    - b. Over-discharge protection
    - c. over current protection
    - d. Short circuit protection
    - e. High
  3. The BMS should be capable of cell balancing preferably non- dissipative cell balancing.
  4. The BMS should be able to monitor the cells in the battery.
  5. The BMS should have two connectors one a 2 pin CPU Connector for Power and another a 3 Pin JST connector for SMBUS.



6. All protections need to be resettled, not compromise.

### **LIGHT SOURCE**

- I. The luminaries should use white LEDs of 8 Watt each. The colour temperature of white LEDs should be in the range of 5500o K – 6500oK. Use of LEDs which emit ultraviolet light will not permitted.
- II. The light output from the white LED light source should be constant through-out the operation of the lights.
- III. The lamps should be housed in an assembly suitable for indoor use with an appropriate heat sink to dissipate the heat generated by LEDs during operation. The temperature of LED should not increase more than 10° above room temperature. This condition should be complied for 5 hours of operation of the lamp at a stretch while battery operating at any voltage between the loads disconnect and the charge regulation set point.
- IV. The luminaries must use the optics and diffuser in order to have uniform and glaze free light.
- V. The make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of white LEDs used in the lighting system must be furnished along with the system.
- VI. All Luminaries should have a built in ON/OFF switch and fuse.

### **ELECTRONICS**

- I. Electronics should operate at 12/24V and should have adequate temperature compensation arrangement for proper charging of the battery throughout the year.
- II. Necessary lengths of wires / cables, switches and fuses should be provided.
- III. The voltage drop from module terminals to the battery terminals should not exceed 1.0 volts including the dropage across the diode and the cable when measured at maximum charging current.
- IV. The PCB containing the electronics should be capable of solder free installation and replacement.
- V. Necessary lengths of wires/cables, switches suitable for DC use and fuses should be provided.

### **ELECTRONIC PROTECTIONS**

- I. Adequate protection is to be incorporated under “No Load” condition, e.g. when the lamps and other loads are removed and the system is switched ON.
- II. The system should have protection against battery overcharge, deep discharge condition.
- III. Load reconnect should be provided at 90 % of the battery capacity status.
- IV. Adequate protection should be provided against battery reverse polarity.
- V. Fuses should be provided to protect against short circuit conditions.
- VI. Protection for reverse flow of current through the PV module(s) should be provided.

### **MECHANICAL COMPONENTS**

- (i) GI frame structure should be provided to hold the SPV module.
- (ii) The frame structure should have provision to adjust its angle of inclination to the horizontal, so that it can be installed at the specified tilt angle.
- (iii) Light source should be either for wall mounted or ceiling mounted or can be hung from the ceiling in a stable manner, as per site requirements.
- (iv) A vented plastic/ wooden/ metallic box with acid proof corrosion resistant paint for housing the storage battery indoors should be provided.

### **INDICATORS**

- The system should have two indicators, green and red.
- 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.
- Red indicator should indicate the battery “Load Cut Off” condition

### **QUALITY AND WARRANTY**

- (i) The Solar Home Lighting system including Battery will be warranted for a period of five years from the date of installation & commissioning.
- (ii) The PV module(s) will be warranted for a minimum period of 10 years from the date of

supply. PV modules used in Solar Home Lighting System 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 Battery should be warranted for a period of 05 years.
- (iv) The Warranty Card to be supplied with the system must contain the details of the system. The manufacturers can also provide additional information about the system and conditions of warranty as necessary.

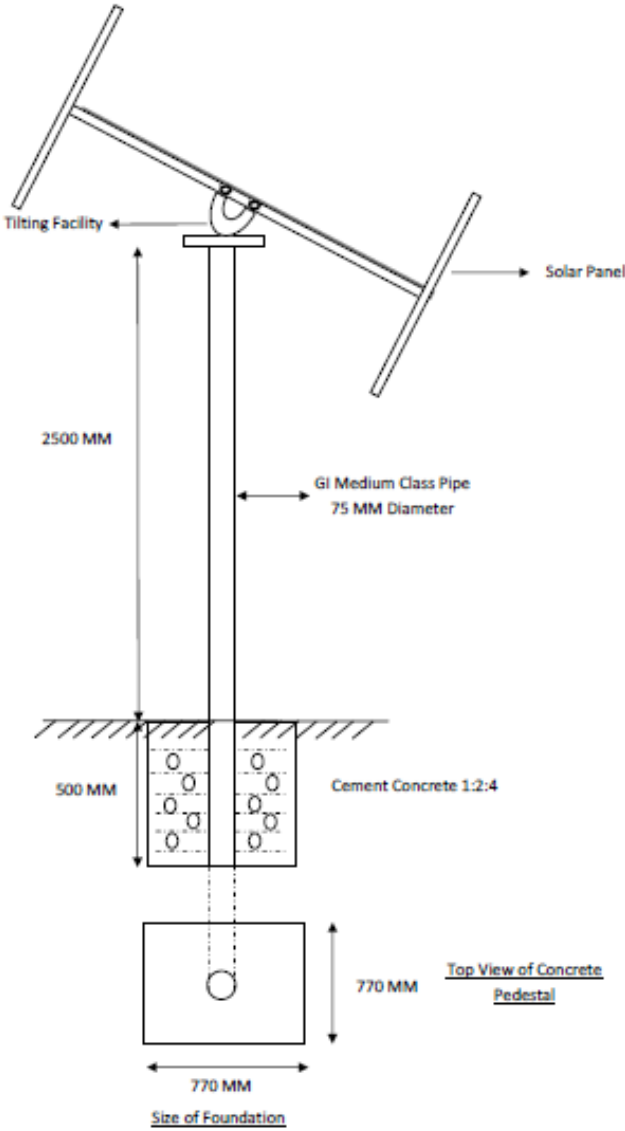
#### **OPERATION and MAINTENANCE MANUAL**

An Operation, Instruction and Maintenance Manual, in English and Hindi language, should be provided with the Solar Home 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 Home Lighting System - its components, PV module, battery, electronics and luminaire and expected performance.
- Significance of indicators.
- 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 must be indicated in the manual.
- Clear instructions about mounting of PV module(s).
- Clear instructions on regular maintenance and trouble shooting of the Solar Home Lighting System.
- DO's and DONT's.
- Name and address of the contact person for repair and maintenance.

**DRAWING**

Installation of Solar Panel for Household Standalone System



**36. COMPREHENSIVE MAINTENANCE GUIDELINES OF SOLAR HOME LIGHTING SYSTEM (SHLS) [TO BE MANDATORILY FOLLOWED BY BIDDER]**

For the optimal operation of a SHLS, maintenance must be carried out on a regular basis. All the components should be kept clean. It should be ensured that all the components are fastened well at their due place. Maintenance guidelines for various components viz. solar panels, Charge controller, wiring etc. are discussed below. The Comprehensive Maintenance of Solar Home Lighting System would include cleaning of module, insurance, and replacement of defective modules, Charge Controller spares & other Part for a period of 5 years systems

The bidder shall be responsible for all the required activities for successful Comprehensive maintenance of the Solar Home Lighting system for a period of 5 years.

- a. Arrangement of qualified and trained technicians till the Comprehensive Maintenance period for projects.
- b. Monthly cleaning of solar modules.
- c. Monthly checks of the Solar Modules, Charge Controller, Battery and BoS shall be carried out as a Part of routine, preventive and breakdown maintenance.
- d. Immediate replacement of defective Modules, Charge Controller and other equipment as and when required, within 7 days.
- e. Supply of all spares, consumables and fixtures as required. Such stock shall be maintained for all associated equipment and materials as per manufacturer/ supplier's recommendations.
- f. If negligence/ mal-operation on Part of the Bidder's operator results in failure of equipment, such equipment should be repaired/ replaced by the Bidder free of cost.
- g. Co-ordination with Beneficiaries and CREDA as per the requirement for monitoring Report. Furnishing monitoring Report each month to CREDA positively by 1<sup>st</sup> week of every month for the previous month. Failure to adhere may result in non-disbursal of payment.
- h. For any issues related to Comprehensive maintenance, a contact number shall be made available to the beneficiary where solar home lighting system is installed inform bidder's authorized technical person to **attend** within 72 hours. If not attended within such stipulated time, a complaint may be raised to CREDA, pursuant to which, a penalty of Rs. 10,000 for full month or more shall be imposed for 01 to 05 solar home lighting systems, Rs. 25000 for 05 to 10 solar home lighting systems and Rs. 50000 for more than 10 solar home lighting systems. This will be applicable till 5 years of Comprehensive Maintenance as per the Scope of the bid.
- i. If any jobs covered in Comprehensive Maintenance Scope as per bid are not carried out by the Bidder during the Comprehensive Maintenance period, the Engineer-In-Charge of CREDA shall take appropriate action as deemed fit. CREDA reserves the right to make surprise checks/ inspection visits at its own or through authorized representative to verify the Comprehensive Maintenance activities being carried out by the Bidder. Failure to adhere to above guidelines will result in penal action including debarring from Participation in next bid.
- j. If a system is non-operational for more than Fifteen days than warrantee period shall extend for the period in which system is non-operational.

**MONITORING REPORT**

The bidder shall submit the Monitoring report monthly to Zonal/Regional/District office of CREDA in Prescribed Performa. **If the monthly generation report is not received regularly for more than three months in continuation than the Bidder shall be proposed for black listing for at least two years or for the period as decided by CREDA. CREDA** will have the right to depute it's representatives to ascertain the progress of contract at the premises of works of the bidder. Non submission of the report shall be considered as "Breach of Contract" and shall attract punitive actions as per the relevant provisions of the Contract including non-release of any payment. However, the decision of CREDA shall be final in this regard. The bidder shall submit the Monthly Comprehensive Maintenance Report mandatorily to CREDA as per the Format enclosed at **Annexure A, every month**. Maintenance work shall be conducted as per following steps:

**1.SOLAR PANELS**

- a. The panels are to be cleaned at least once every month.
- b. Any bird droppings or spots should be cleaned immediately.
- c. Use water and a soft sponge or cloth for cleaning.

- d. Do not use detergent or any abrasive material for panel cleaning.
- e. Iso-propyl alcohol may be used to remove oil or grease stains.
- f. Do not spray water on the panel if the panel glass is cracked or the back side is perforated.
- g. Wipe water from module as soon as possible.
- h. Use proper safety belts while cleaning modules at inclined roofs etc.
- i. The modules should not be cleaned when they are excessively hot. Early morning is particularly good time for module cleaning.
- j. Check if there are any shade problems due to vegetation or new building. If there are, make arrangements for removing the vegetation or moving the panels to a shade-free place.
- k. Ensure that the module terminal connections are not exposed while cleaning; this poses a risk of electric shock.
- l. Never use panels for any unintended use, e. g. drying clothes, chips etc.
- m. Ensure that monkeys or other animals do not damage the panels.

**2. CABLES AND CONNECTION BOXES**

- a. Check the connections for corrosion and tightness.
- b. Check the connection box to make sure that the wires are tight, and the water seals are not damaged.
- c. There should be no vermin inside the box.
- d. Check the cable insulating sheath for cracks, breaks or burns. If the insulation is damaged, replace the wire.
- e. If the wire is outside the building, use wire with weather-resistant insulation.
- f. Make sure that the wire is clamped properly and that it should not rub against any sharp edges or corners.
- g. If some wire needs to be changed, make sure it is of proper rating and type.

**3. Charge Controller**

- a. The Charge Controller should be installed in a clean, dry, and ventilated area.
- b. Remove any excess dust in heat sinks and ventilations. This should only be done with a dry cloth or brush.
- c. Check that vermin have not infested the inverter. Typical signs of this include spider webs on ventilation grills or wasps’ nests in heat sinks.

**4. Battery**

- a. Inspect electrical connection with Positive (+) and Negative (-) terminal and tighten the connection, if required.
- b. Set Charging parameter in Charge Controller as per direction indicated in installation guide of battery Manufacturer Company.
- c. Record the Current and Voltage of battery and module array once in a month in prescribed format or register.
- d. Remove any excess dust in battery. This should only be done with a dry cloth.
- e. Use suitable measures and protection while battery maintenance.

**37. INSPECTION AND MAINTENANCE SCHEDULE**

Component	Activity	Description	Interval	By
PV Module	Cleaning	Clean of bird droppings/dark spots on modules.	Immediately	User/Technician
	Cleaning	Clean PV modules with plain water or mild dish washing detergent. Do not use brushes, any type of solvents, abrasive, or harsh detergents.	Monthly	User / Technician

<b>Component</b>	<b>Activity</b>	<b>Description</b>	<b>Interval</b>	<b>By</b>
PV Array	Inspection	Check PV Module and rack for any damage note down location and serial no. of damaged modules	Monthly	Technician
	Inspection	Determine if any new object such as a vegetation growth are causing shading of the array and move them if possible.	Monthly	Technician
	Vermin removal	Remove bird nests or vermin from array and rack area	Monthly	Technician
Junction Boxes	Inspection	Inspect electrical boxes for corrosion or intrusion of water or insects. Seal boxes is required. Check position of switches and breakers. Check operation of all protection devices.	Monthly	Technician
Battery	Inspection	Inspect electrical connection with Positive (+) and Negative (-) terminal and tighten the connection, if required.	Monthly	Technician
Wiring	Inspection	Inspect cabling for signs of cracks, defects, loose connections, overheating, arching, short or open circuits, and ground faults.	Monthly	Technician
Charge Controller	Inspection	Observe	Monthly	Technician

FORMAT – A

**Monthly Maintenance Report (AMR) for Solar Home Lighting System**

**Month and year:**

**Name of the System Integrator:**

Sr	Date	Name of Beneficiary with Address	Condition of (Working / Not working)	If found Not working (write reason)	Repair or Replacement done for keep functioning (write details)*	Signature of beneficiary	Remarks
1	2	3	4	5	6	7	8

\*Provide details of any replacement of systems/components, damages, system shutdown breakdown, etc under column 06.

SECTION -5  
ANNEXURES, SPECIFICATIONS, FORMS

ANNEXURE – I

**(EXPERIENCE CERTIFICATE ON THE OFFICIAL LETTER HEAD OF CONCERNED BENEFICIARY ORGANISATION WITH SEAL AND SIGN BY AUTHORIZED SIGNATORY)**

Ref. No.....

Date.....

**CERTIFICATE OF COMPLETION OF SOLAR OFF-GRID SYSTEM (WITH BATTERY)**

This is to certify that ..... (Name of Bidder, Address of Registered Office) has successfully completed the work of design supply, installation & commissioning of.....Nos. of Solar on-grid/off-grid System of capacity of ..... at various locations in ..... State, as per following details–

S.N.	Capacity of Solar on-grid/off-grid System kWp	Year*	Total No. of Systems	Work Order No. and Date	Remarks
<b>Total</b>					

**\* On-grid/Off-grid/Solar Home Lighting System commissioned during any 05 financial years should only be mentioned**

The workmanship and performance of the above installed systems are found satisfactory and are in successful operation.

**Signature of  
Authorized Signatory**

Name:.....

Designation:.....

**Seal of Authorized Signatory**



**FORMAT FOR THE AFFIDAVIT**

(Declaration of conflict of Interest)

(Note: This affidavit should be on a non-judicial stamp paper of Rs. 100/- and shall be attested by Magistrate/Sub-Judge/ Notary Public)

I,..... (Name of the bidder authorized representative of the bidder) son/ daughter of..... resident of ..... (Full address), aforesaid solemnly affirm and state as under:

1. I hereby certify that all the information furnished with the bid submitted in response to Tender/bid No.152278/CREDA-PMJANMAN/PVTG/SPVHLS/2023-24 Dated: 31.01.2024 issued by Chhattisgarh State Renewable Energy Development Agency (CREDA) (authority inviting bids) for Supply, Design, Installation, and Commissioning of Solar Home Lighting System of capacity of 300 Wp with 5 years Comprehensive maintenance contract (CMC) and onsite unconditional warranty installed on the households of Particularly Vulnerable Tribal Group (PVTG) anywhere in the state of Chhattisgarh.
2. I hereby certify that I have been authorized by..... (Company name) to sign on their behalf, the bid mentioned in Sr.No.1 above.\*
3. Information furnished in the bidding documents is correct in all respects to the best of my knowledge and belief.
4. The near relations, as per clause 30(a) in Section - 02, in CREDA, are not in employment of the firm/company. (Note:-By the term near relatives is meant Wife, Husband, Parents and Son, Brother, Sister, Brother-in-law, Father-in-law, Mother-in-law etc.) (if working in CREDA then mention the name/names)  
.....  
.....
5. The name of near relative (if any) as per Clause 31(b) who retired/removed within the last two years. (If none, clearly State **None**)  
.....  
.....
6. **No near relative is working as Financial Accountant in the CREDA.** (if working in CREDA then mention the name/names)  
.....  
.....
7. **No person is working in the company in any capacity, who are near relatives to any Officer in Chhattisgarh State Renewable Energy Development Agency (CREDA)** (if working in CREDA then mention the name/names)  
.....
8. Our company/firm/ or otherwise is not under the clarification 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 Central or the State Government as mention in clause 1(f) of tender document.
9. I hereby authorize the CREDA Officials to get all the documents verified from appropriate sources (s).

**Deponent**

Place: .....

Date: .....

\* Not applicable if the bidder is an individual and is signing the bid on his own behalf.

**Verification**

I..... S/o.....do here by affirm that contents stated in Para 1 to 9 above and contents submitted in technical & financial bid are true to the best of my knowledge and believe and are based on my/our record.

Verified that this date of ..... at (Place).....

**Deponent**

**e-Price Bid**

*(e-bidding as per Specifications & Scope of Work of BID DOCUMENT No.152278/CREDA-PMJANMAN/PVTG/SPVHLS/2023-24 Dated: 31.01.2024)*

**Rates for the Design, Supply, Installation & Commissioning of Solar Home Lighting System with 5 years Comprehensive maintenance contract (CMC) and onsite unconditional warranty, as per scope of work, technical requirement, specifications, terms and conditions of the tender anywhere in the state of Chhattisgarh.**

**(Rates should be quoted in INR, exclusive GST)**

S.N.	Description	Cost of Design, Supply of system (INR excl. GST)	Cost of Installation and Commissioning (INR excl. GST)	Cost of 05 Year Comprehensive Maintenance Contract (CMC) (INR excl. GST)**	Total Cost excl. GST (INR)*
1	2	3	4	5	6=(3+4+5)
1	Solar Home Lighting System with 300 watt module of capacity 1250Wh LFP batteries with controller and BOS as per MNRE specifications under New Solar Power Scheme				

\* Lowest (L1) Bidder would be Compared Based on Total Cost (exclusive of applicable GST) mentioned in Column No. 6.

\*\*Cost Quoted for CMC in column No. 6, Should not be less than 8% of Total Project Cost, else the Bid will not be accepted.

**Certified that rate quoted above are as per the requirement, specification and terms & condition mentioned in the bid document.**

**Above rates are FOR anywhere in the state of Chhattisgarh inclusive of roadworthy packing, loading, unloading, all types of incidental expenses, insurance, duties and any other job required to properly execute the work with 5 years Comprehensive maintenance contract (CMC) and onsite unconditional warranty, as mentioned in the Bid document. Above rates applicable for Solar Home Lighting System as per MoP/MNRE Specifications stated in Bid document.**

**(No other cost will be claimed other than above quotes price & the applicable GST)**

**Signature of the Authorized Signatory :.....**

**Seal of Company: .....**

**Date: .....**

ANNEXURE – IV

PM-JANMAN & CREDA Logo to be pasted on SPV modules and Batteries & Controller of Solar Home Lighting System as instructed by CREDA.



**DRAFT AGREEMENT**

CONTRACT AGREEMENT BETWEEN Chhattisgarh State Renewable Energy Development Agency (CREDA) Raipur AND M/s..... Represented by..... THIS CONTRACT AGREEMENT against Bid DOCUMENT No.152278/CREDA-PMJANMAN/PVTG/SPVHLS/2023-24 Dated: 31.01.2024 (also referred to as “Service Contract”) is made on the day of .....2024.

**BETWEEN**

Chhattisgarh State Renewable Energy Development Agency (CREDA) Raipur a society incorporated under the laws Society Registration Act 1973, (1973 , Sr. No. 44 ) (with amendment from time to time) and having its Registered Office at VIP Road Near Energy Education Park, Village-Fundhar, Raipur and (hereinafter called “The Employer” and also referred to as “CREDA”)

**And**

.....Represented by .....a company incorporated under the laws of Companies Act 1956/2013/ Partnership firm/ Proprietorship firm (as applicable, with amendment from time to time ) and having its Principal place of business at .....and Registered Office at.....hereinafter called “The Contractor” and also referred to as “.....”

Whereas the contractor has offered to enter into contract with the said CREDA for the Supply, Design, Installation, and Commissioning of Solar Home Lighting System of capacity 300Wp anywhere in the state of Chhattisgarh with 5 years Comprehensive maintenance contract (CMC) and onsite unconditional warranty.

Vide **BID DOCUMENT No.152278/CREDA-PMJANMAN/PVTG/SPVHLS/2023-24 Dated: 31.01.2024** on the terms and conditions herein contained and the rates approved by the CREDA (Letter No. .... dated..... annexed here to) have been duly accepted and whereas the necessary security deposit shall be furnished in accordance with the provisions of the Bid document and whereas no interest will be claimed on the security deposits.

Now these presents witness and it is hereby agreed and declared by and between parties to these presents as follows -

The Contractor shall during the period of this contract, that is to say from.....To.....or completion thereof, until this Contract shall be determined by such notice as is herein after mentioned, safely carryout, by means of labour employed at his own expenses and by means of tools, implements and equipment etc. to be supplied by him to his labour at his own expenses, for installation of “ Solar Home Lighting System of capacity 300Wp anywhere in the state of Chhattisgarh” as described in Bid documents. (Annexed to the agreement).

- 1) The NIT (Notice Inviting Bid), Corrigendum to NIT, Notices, Bid documents (Qualifying, Technical and Financial), approved rates annexed hereto and such other additional particulars, undertaking, instructions, general conditions of contract, Scope of work, Technical specifications of Solar Home Lighting System and Annexure therein, engineering documents, detailed specifications of BOS & drawings, so far they relate to the Bid DOCUMENT No.152278/CREDA-PMJANMAN/PVTG/SPVHLS/2023-24 Dated: 31.01.2024 as may be found requisite to be given during execution of the work shall be deemed and taken to be an integral pa of the contract and shall also be deemed to be included in the expression "The Agreement or "The Contract "wherever here in used.

The contractor shall also supply the requisite number of workmen with means & materials as well as tools, appliances, machines, implements, vehicles for transportation, carriage etc. required for the proper execution of work within the time prescribed in the work orders and /or as per the Bid conditions.

- 2) The Engineer-in-Charge or his authorized representative(s) shall be entitled at all reasonable times to inspect and supervise and test during supply, installation and commissioning. Such inspection shall not relieve the eligible SI from their obligations under this contract.
3. Material can be inspected before dispatch or in transit by the authorized representatives of CREDA at the factory at the cost of the eligible SI, if desired by CREDA. CREDA reserves right to inspect the material at Godowns / Temporary Stores before dispatch and also at works sites.
4. CREDA shall deduct TDS for Income Tax, applicable cess on Civil Work etc. under various acts and deposited with the appropriate authority. Costs and taxes before execution of agreement with CREDA so as to ensure tax deposition as per Government Rules accordingly.
5. **ELIGIBLE SYSTEM INTEGRATOR'S LIABILITY IN CASE OF DEFAULT-**  
 CREDA may by written notice of default to the eligible SI, terminate the contract in circumstances detailed here under -
  - a) If in the opinion of the CREDA, the eligible SI fails to complete the work within the time specified in the Work Order or within the period for which extension has been granted by CREDA to the eligible SI.
  - b) If in the opinion of CREDA, the eligible SI fails to comply with any of the provisions of this contract.
  - c) In the event of CREDA terminating the contract in whole or in part as provided in paragraph (a) above, CREDA reserves the right to engagement of another eligible SI or agency upon such terms and in such a manner as it may deem appropriate and the eligible SI shall be liable to CREDA for any additional costs or any losses caused to CREDA as may be required for the completion of erection of the Solar Home Light System and/or for penalty as defined under this Bid document until such reasonable time as may be required for the final completion of the work. CREDA may debar such a defaulter SI for up to three years from taking participation in taking part in all activities of CREDA.
  - d) In the event CREDA does not terminate the contract as provided in paragraph (a) the eligible SI shall continue performance of the contract, in which case he shall be liable to CREDA for penalty for delay as set out in clause 15 until the work is completed.
6. **FORCE MAJEURE-**  
 The eligible SI shall not be liable for any penalty for delay or for failure to perform the contract for reasons of FORCE MAJEURE such as of God, acts of public, enemy, LWE problems, acts of government, cyclone, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes provided that if SI shall submit delay notice with appropriate cause of delay to the CREDA in writing within **15 days** of force majeure. CREDA shall verify the facts and may grant such extension as facts justify. Delay in supply of any accessories of solar home light system etc. by the related vendors, to whom the Bidder has placed order, shall also not be treated as force majeure.
7. **REJECTION OF WORKS -**  
 In the event of any of the material supplied/work done by the eligible SI is found defective in material or workman ship or otherwise not in conformity with the requirements of this contract specifications, CREDA shall either reject the material and/or work and advise the eligible SI to rectify the same. **CREDA may impose penalty for such rejection up to the 200% cost of the entire system. Habitual/repeated offenders shall be black listed/debarred to participate in the any Bid/ Activity of CREDA till further orders.** The eligible SI on receipt of such notices shall rectify or replace the defective material and rectify the work free of cost. If the eligible SI fails to do so CREDA may-
  - (a) At its option replace or rectify such defective materials and/or work and recover the extra cost so involved from the eligible SI plus **15%** service charges of the cost of such rectification, from the eligible SI and/ or terminate the contract for balance work/ supplies with enforcement of penalty as stated above.
  - (b) Defective materials/workmanship will not be accepted under any conditions and shall be rejected outright without compensation. The eligible SI shall be liable for any loss/damage sustained by CREDA due to defective work with enforcement of penalty as stated above.

**8. EXTENSION OF THE TIME-**

If the completion of installation is delayed due to any reason beyond the control of the eligible SI, the eligible SI shall without delay give notice to the CREDA in writing of his claim for an extension of time. CREDA on receipt of such notice may or may not agree to extend the contract/delivery date of the Solar Home Light System as may be reasonable but without prejudice to other terms and conditions of the contract. CREDA has full right for unconditional time extension.

**9. PENALTY FOR DELAY IN COMPLETION OF CONTRACT-**

- a. If the eligible SI fails to complete the assigned work within the schedule time specified in the Work Order or any extension granted there to, CREDA will recover from the SI as penalty of up to **One percent (1%)** per week of the system price excluding GST for every delayed system. For this purpose, the date of commissioning shall be reckoned as the date of completion. The total penalty shall not exceed **10% (Ten Percent)** of the cost. The eligible SI shall not be liable for any penalty for delay or for failure to perform the contract for reasons of FORCE MAJEURE.
- b. Review of the progress of installation of Solar Home Lighting system allocated to SI shall be done from time to time by CREDA and if the progress of installation is found unsatisfactory, CREDA shall allocate of entire remaining uninstalled system or their part of can be re-allocated to other SI as per discretion of CREDA.

**10. PENALTY DUE FROM THE ELIGIBLE SI-**

All costs of damages and delays for which the eligible SI is liable to the CREDA will be deducted from any money due to the eligible SI including the security deposit of project under CREDA.

**11. RESPONSIBILITY OF ELIGIBLE SI'S -**

Notwithstanding anything mentioned in the specifications of subsequent approval or acceptance of the Solar Home Lighting system by CREDA, if any, the ultimate responsibility for satisfactory performance of the entrusted work shall rest with the eligible SI. If in any case the eligible SI does not complete the work as per the Work Orders issued to them then CREDA may take over the task & complete the project at the risk and cost of eligible SI.

**12. RESPONSIBILITY TO RECTIFY THE LOSS AND DAMAGE-**

If any loss or damage occurs to the work or any part thereof or materials/plant/equipment's for incorporation therein the period for which the eligible SI is responsible for the cause thereof or from any cause whatsoever, the eligible SI shall at his own cost rectify/replace such loss or damage, so that the permanent work confirms in every respect with the provision of the contract to the satisfaction of the Engineer in charge. The eligible SI shall also be liable for any loss or damage to the work/equipment's occasioned by him in course of any operation carried out to him during performing the contract.

**13. RESPONSIBILITY TOWARDS THE WORKMAN OR OUT SIDERS-**

- a. **The eligible SI shall have to take insurance coverage from any authorized Insurance Company against Workmen Compensation due under Workmen Compensation Act and submit copy of the insurance document before issuance of Work Order.**
- b. The eligible SI shall ensure all safety measures during execution and repairs of the work. CREDA, will, in no case be responsible for any accident fatal or non-fatal, caused to any workman or outsider in course of transport or execution or repairs of work.
- c. All the expenditure including treatment or compensation will be entirely borne by the eligible SIs. The eligible SI shall also be responsible for any claims of the workers including, labor payments PF, Accidental Insurance, Gratuity, ESI & other legal obligations.
- d. CREDA shall have all rights to deduct such claims of payments from SI in case of complaints of such violations.
- e. Contractor shall provide 05 years warranty in installed Solar Home Lighting System from the date of commissioning as per the terms & conditions prescribed in the **BID DOCUMENT No.152278/CREDA-PMJANMAN/PVTG/SPVHLS/ 2023-24 Dated: 31.01.2024**

**14. DECLARATION OF CONFLICT OF INTEREST -**

- a. Any regular employee working or worked on basis of contract or through placement agency cannot work directly or indirectly in any scheme of CREDA. If such a person is found working with any SI or through sublet then, such SI shall be blacklisted for three years.
- b. The bidder shall not be permitted to Bid for the work if the section of Head Office CREDA (responsible for implementation of work) in which his/her near relative is posted. The bidder shall also intimate the names of his near relatives working in CREDA. Bidder shall also intimate the name of persons who are working with him in any capacity and who are near relatives to any employee in CREDA. Any breach of this condition by SI would render himself liable to be blacklisted for three years and removed from

approved list of SIs in CREDA.

**Note-** By the term near relatives are meant Wife, Husband, Parents and Son, Brother, Sister, Brother-in-law, Father-in-law, and Mother-in-law etc.

- c. Bidder must produce an affidavit (**Annexure-II**) stating the names of retired/removed employee of CREDA (if any) in his/her employment who retired /removed within last two years, if in case there is no such person in his employment, his affidavit should clearly state this fact. **This affidavit is mandatory, if it is not produced along with the bid, the bid shall be rejected.**
- 15. The contractor shall arrange insurance coverage for the materials and Solar Home Light Systems at his/beneficiary's custody for the work under execution and successful commissioning and subsequent handover to the beneficiary. The contractor shall take up insurance or such other measures for the manpower so as to cover the claim for damage arising under workmen's compensation Act and other applicable State/ Central laws. CREDA shall not bear any responsibility on this account.
- 16. Contractor shall arrange for insurance coverage for Solar Home Light Systems and module during warranty period i.e. for 05 years from the date of installation. Insurance should cover for damage and theft. In case of such incidence, The contractor must replace the lost/damaged part within 7days.
- 17. The contractor shall abide by the terms and conditions, rules, guidelines, construction practices, safety precautions etc. stipulated in the Bid document including any correspondence between the contractor and the CREDA having bearing on execution of work and payments of work to be done under the contract.
- 18. The contractor shall be responsible to follow all the laws including Workmen Compensation Act and all other laws in force & shall be responsible for all the obligations towards labour including EPF, ESI, etc.
- 19. All the taxes deductible at source as per Acts in vogue shall be recovered by **CREDA** and deposited with the appropriate authorities.
- 20. Contractor agrees to abide by any decision/instruction passed by the appropriate authority under Anti-profiteering rules notified by the state/central government under GST act.
- 21. Any dispute arising out of the contract shall be subject to the jurisdiction of Hon'ble High Court of Chhattisgarh.

**"Herewith everything and anything contained in Bid document No.152278/CREDA-PMJANMAN/PVTG/SPVHLS/2023-24 Dated: 31.01.2024 is part of this agreement which has been dully signed by bidder, and authorized signatory of CREDA".**

In witness whereof the parties present today has hereby entered into agreement.

**Signed & sealed on behalf of the above**

**Name of Bidder**

**Signed on behalf of**

**CREDA**

Name:  
Designation  
**Witness:**

Name:  
Designation:

1. Name:-.....

Address:-.....

2.Name:.....

Address:.....

3.Name:.....

Address:.....



ANNEXURE – VI

FORMAT OF UNDERTAKING, TO BE FURNISHED ON COMPANY LETTER HEAD WITH  
REGARD TO NON -BLACKLISTING/ NON- DEBARMENT

Date-

To,  
The Tender Cell,  
CREDA, HO,  
Raipur

Sub: Self Declaration for Non-Blacklisting/ Non- Debarment.

**Reference:**

1. Tender/bid No.152278/CREDA-PMJANMAN/PVTG/SPVHLS/2023-24 Dated: 31.01.2024

Dear Sir,

We hereby declare that we, M/s .....  
.....are not blacklisted/debarred by any Central/ State  
Government/ agency of Central/ State Government of India or any other country in the world/  
Public Sector Undertaking/ any Regulatory Authorities in India or any other country in the world  
for any kind of fraudulent activities during the last 5 years.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

**SCHEDULE - I**

**PART 'A': GENERAL INFORMATION**

(Strike off whichever is not applicable. Separate sheets should be used, wherever necessary)

- 01. Name & Address of the Bidder :
- 02. Name & Address of the firm/Company etc. :
  - a) Registered office :
  - b) Factory/works address :
  - c) Fax Nos. :
  - d) Telephone /Mobile Nos.:
  - e) Email id :
- 03. Confirm whether Bidder is Manufacturer : Yes/No
- 04. Only manufacturer to give following particulars
  - a) Address of factory :
  - b) Year of starting manufacture :
  - c) Whether same/similar materials :  
Manufactured earlier (if yes, give reference)
  - d) Yearly/monthly production capacity :
  - e) Maximum yearly production Achieved so far :
- 05. Whether the firm is SSI Unit of Chhattisgarh State : Yes/No
  - a) If yes, write registration No. :
  - b) Whether documentary evidence :  
Regarding registration enclosed
  - c) Items for registration :
  - d) Period of registration :
  - e) Whether latest copy Competency/ Certificate furnished: Yes/No
- 06. Whether the firm is 100% owned by
  - a) State Government : Yes/No
  - b) Central Government : Yes/No
  - If yes, Notification/certificate issued from : Yes/No  
The competent authority to this effect is enclosed
  - a) Whether the bidder is old participant with CREDA: Yes/No
  - b) If yes, whether documentary Evidence is enclosed. : Yes/No
- 07. Any other information that bidder may like to give in order to : Yes/No  
Highlight his bid (If yes, give details )

PLACE:

**SIGNATURE OF BIDDER**

DATE:

NAME IN FULL:

DESIGNATION/STATUS:

FIRM/COMPANY SEAL:

**SCHEDULE - II**

**PART 'B': COMMERCIAL INFORMATION**

(Strike off, whichever is not applicable. Separate sheets should be used. Wherever necessary)

- 01. i) Earnest Money Details : Bank draft/Bankers cheque payable to "CREDA", Raipur  
 ii) Amount of E.M.D. & full details : .....
- 02. Whether the offer is valid for 6months : Yes/No  
 from the date of opening of commercial/technical bid.
- 03. Rate of Sales Tax on the date of bid : (exclusive in the rate quoted)
- 04. **DISCOUNT:**  
 a) Whether any rebate/discount is offered. : Yes/No  
 b) If yes, whether the rebate is unconditional/conditional : Yes/No  
 Rate/amount of rebate/discount  
 c) If conditional State condition : Yes/No
- 05. **PAYMENTTERMS:**  
 Whether CREDA terms of payment is acceptable to Bidder : Yes/No
- 06. **COMPLETION PERIOD OFWORK:**  
 Whether Bidder is agreeing for completion period of work as : Yes/No  
 Specified in the Bid
- 07. **PENALTY CLAUSE:**  
 Whether agreeable to Bid's Penalty Clause : Yes/No
- 08. Whether agreeable to Bid's clause of warrantee period : Yes/No
- 09. **SECURITY DEPOSIT:**  
 Whether Security Deposit clause is understood : Yes/No
- 10. Indicate State, Central Sales Tax Registration Number State : Yes/No  
 Central: (Please Note that in case of non-registration with Commercial Tax,  
 Department Purchase Tax as admissible shall be deducted by the Purchaser from the  
 Bills of the supplier)  
 Please mention whether rates offered are applicable for part quantities. : Yes/No

PLACE:

**SIGNATURE OF BIDDER**  
 DATE:  
 NAME IN FULL:  
 DESIGNATION/STATUS:  
 FIRM/COMPANY SEAL:

**SCHEDULE -III**

**PART 'C': TECHNICAL INFORMATION**

(Strike off whichever is not applicable. Separate sheets should be used. Wherever necessary)

- 01. Whether material offered is exactly as per technical specification : Yes/No
- 02. Whether the copies of completion certificate received during last 3 years : Yes/No  
from other State Nodal Agency or from other Organization for  
Solar off-grid systems (if yes, give details) enclosed.
- 03. Whether pamphlets/technical details literatures along with drawing etc. : Yes/No  
furnished with the offer (if yes, give details)
- 04. Whether the Bidder agrees to furnish material test certificates in :  
Yes/No respect of chemical composition and physical properties from Govt./  
Govt. approved lab with each batch of supplies.
- 05. Whether the Bidder has furnished details of manufacturing equipment : Yes/No  
and short history of plant (if yes, give details)
- 06. Whether details of manufacturing process furnished with offer. : Yes/No  
(if yes, give details)
- 07. Whether all testing facilities are available.: Yes/No  
If so, give details and in case of non-availability of facilities indicate  
approved lab available in surrounding areas where tests are proposed to be conducted.

PLACE

**SIGNATURE OF BIDDER**  
DATE  
NAME IN FULL  
DESIGNATION/STATUS FIRM/COMPANY SEAL

**SCHEDULE -IV**

**TECHNICAL DEVIATIONS**

From,

**Bidder Name & Address -**

To,  
 The Tender Cell,  
 CREDA, HO,  
 Raipur  
 Sub – Technical Deviations.  
 Dear Sir,

- 01.** The technical deviations & variations to the specifications stipulated in the Bid, for the item quoted are as under -

<b>S.N.</b>	<b>Condition</b>	<b>Clause No. of Tender Document</b>	<b>Page No. of Tender Document</b>	<b>Statement of deviations and variations</b>
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- 02.** Except aforesaid deviations, the entire order, if placed, on us shall be executed in accordance with your specifications and other conditions. Variation/deviations etc. if found, elsewhere in our offer should not be given any considerations while finalizing the Bid.

PLACE:

DATE :

**SIGNATURE OF BIDDER**  
 NAME IN FULL DESIGNATION/STATUS  
 FIRM/COMPANY SEAL

**NOTE** - Continuation sheet of like size & format may be used as per bidder's requirements and shall be annexed to this schedule.

FORMAT – A

**Site Survey, Feasibility Report and site clearance certificate**

**Name of the System Integrator:**

**LOI No. and Date:**

Sr	District	Block	Name of Village	Name of Habitation	Beneficiary Name	Father Name	PVTG category category	Sign/ Thumb impression of beneficiary
1	2	3	4	5	6	7	8	9

1. Declaration has been taken from each proposed beneficiary that they have not been benefitted from any scheme of household electrification of Central/State Govt.
2. Above mentioned site is found clear and feasible for installation of Solar Home lighting System.
3. Above mentioned beneficiaries are belong to PVTG category.
4. Geo-tagged photograph of above all mention site are enclosed herewith.

**SEAL & SIGNATURE OF SARPANCH**  
NAME

**SEAL & SIGNATURE OF SI**  
NAME IN FULL DESIGNATION

**END**