



Chhattisgarh State Renewable Energy Development Agency (CREDA)

Near Energy Education Park, Village Fundhar

VIP (Air Port Road) Raipur 492015 (C.G.)

Ph.: 0771-7112473/7112459

E-mail: info@creda.in, Website: www.creda.co.in

E-BID DOCUMENT No. 26217/CREDA/BID/RE-03/Solar Tree/2019

FOR DESIGN, SUPPLY, FABRICATION, INSTALLATION, TESTING & COMMISSIONING OF SOLAR TREE WITH 05 YEAR COMPREHENSIVE OPERATION & MAINTENANCE OF SOLAR TREE ANYWHERE IN THE STATE OF CHHATTISGARH

Important Events and their schedule for this E-Bid are as follows-

S. No	Particulars	Date	Time	Place
1.	Submission of sample, Bid Documents, Technical Bid	22-02-19	Till 11.30 AM	Office of Chief Engineer (RE – III), Head Office, CREDA
2.	Examination of Bid Documents & Technical Bid	22-02-19	from 12.30 PM	
3.	Submission of Price Bid through http://cspc.co.in	22-02-19	Till 11.30 AM	http://cspc.co.in Web Portal
4.	Opening of Price Bid	22-02-19	After Technical Bid	At Bio Diesel Conference Hall, Near Energy Education Park, VIP Road, Raipur

Bid Document Cost:

Document can also be downloaded from our website <https://creda.co.in/> with the cost of Bid as mentioned in NIT, which shall have to be deposited along with the Bid document

TABLE OF CONTENTS

S.N.	Description	Page No.
A	Notice Inviting E-Bid	3
B	Check List	4
C	Undertaking by the Bidder	5
D	General Information about this Bid	6
E	Eligibility Conditions	7
F	Instructions for Bidders	8-11
G	General Conditions of Contract	12-18
H	Scope of Work	19
I	Technical Specifications	20-26
J	Symbolic Drawing & photographs of Solar Tree	27-28
K	Price Bid	29

NOTICE INVITING LIMITED BID

CREDA invites sealed Bids from registered system integrators in CREDA for SPV Projects for FY 2018-19 for Design, Supply, Fabrication, Installation, Testing & Commissioning of Solar Trees with five years comprehensive operation & maintenance contract at anywhere in the state of Chhattisgarh.

S.N.	Item Description	Cost of Bid Document	EMD	Essentials*
1	Design, Supply, Fabrication, Installation, Testing & Commissioning of Solar Tree at anywhere in Chhattisgarh state.	₹ 5,000/-	₹ 5.00 Lacs/-	<i>* for details pl see eligibility conditions of the Bid documents</i>

Important Events and their schedule for this E-Bid are as follows-

S. No	Particulars	Date	Time	Place
1.	Submission of sample, Bid Documents, Technical Bid	22-02-19	Till 11.30 AM	Office of Chief Engineer (RE – III), Head Office, CREDA
2.	Examination of Bid Documents & Technical Bid	22-02-19	from 12.30 PM	
3.	Submission of Price Bid through http://cspc.co.in	22-02-19	Till 11.30 AM	http://cspc.co.in Web Portal
4.	Opening of Price Bid	22-02-19	After Technical Bid	At Bio Diesel Conference Hall, Near Energy Education Park, VIP Road, Raipur

Note:-

1. Price Bid shall be submitted online only at <http://www.cspc.co.in>,* however technical bid will have to be submitted in hard copy at Office of Chief Engineer (RE – III), Head Office, CREDA, Raipur. Bidders are advised to follow the instructions provided for Registration and E Submission Process accordingly.
2. The bid forms, General Instructions to Bidders and other details including amendments/changed can be viewed/ downloaded from website <http://www.creda.co.in/>
3. Bid notice is also available on CREDA website <http://www.creda.co.in/> the link notice or <http://www.cspc.co.in>.
4. CREDA reserves all rights to accept/reject any or all Bids in full/part without assigning any reasons.

(Rajiv Khare)
Chief Engineer, CREDA

B. Check List

To ensure that your Bid submitted to CREDA is complete in all respects, please go through the following checklist & tick mark for the enclosures attached with your Bid:

S.No.	Description	Attached / Not Attached	Page no. if attached
1	Proof of submission of Bid Fee and EMD		
2	Proof of having registration in CREDA for FY 2018-19.		
3	List and Performance Certificate issued by Govt/Govt Undertaking for direct experience of Supply, installation & commissioning of minimum 500 KW Solar Projects by the Bidder		
4	Sample of the Solar Tree along with the FEA report of solar tree structure certified by a registered structural engineer		
5	Balance Sheets of last three financial years certified by a registered Chartered Accountant showing positive net worth and overall annual turnover of 10 Crore in SPV Projects .		
6	The original document duly signed & sealed on each page, as a confirmation of acceptance of Terms & Conditions (T&C)		
7	Declaration of the supplier about any relatives working with CREDA		

Details of EMD & Bid Document Fee Attached

S.No.	Description
1	Earnest Money Deposit - Earnest Money Deposit of ₹ 5.00 lakh /-, submitted in the form of Demand Draft/ NEFT/RTGS, drawn on Bank,Branch, bearing DD/BC No..... dated.....is attached herewith.
2	Bid Document Fee - Bid Document Fee of ₹ 5000.00 /-, submitted in the form of Demand Draft/ NEFT /RTGS, drawn on Bank,Branch, bearing DD/BC No..... dated.....is attached herewith.

(Sign & Seal of the Manufacturer)

C. UNDERTAKING OF THE BIDDER

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 Bid 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 open for Ninety (90) days from the due date of submission thereof and not to make any modifications in its terms and conditions.

A sum of ₹5.00 lakh /- is hereby forwarded as earnest money in the form of crossed demand draft payable to CREDA at Raipur (C.G.). If I/We, fail to commence or complete the sanction ordered in specified time 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 a Bid 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 state sales tax registration TIN No. is _____ and CST 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.

Dated: Signature

Place: Name of Bidder with seal

Witness

Signature:

Name:

Postal Address:

D. General Information about this Bid

S.No.	Particulars	Details
1	E.Bid No.	E-BID DOCUMENT No. 26217/CREDA/BID/RE-03/Solar Tree /2019, Date 08-02-2019.
2	Particulars of the work	Design, Supply, Fabrication, Installation, Testing & Commissioning of Solar Tree with five years comprehensive onsite unconditional warrantee.
3	Time Period for completion of the work	Within 03 Months from the date of allocation of Work.
4	Mode of submission of Bids	Technical Bid – Off Line Price Bid – E Bidding through http://www.cspc.co.in website.
5	Last date and time for submission of Sample, Bid and Technical Documents (Offline)	Till 11.30 Hours Date 22.02.2019.
6	Last date and time for submission of Bid and Technical Documents (Online)	Till 11.30 Hours Date 22.02.2019.
7	Period of validity of rates for acceptance	Three months from the date of opening.
8	Date and time of opening of Technical Bid	From 12.30 hours Date 22.02.2019.
9	Date and time of opening of Price Bid	After Technical bid Date 22.02.2019 or on the next date.
10	Place of opening Bid	At Bio Diesel Conference Hall, Near Energy Education Park, VIP Road, Raipur.

E. Eligibility Criteria:-

- E-1 Bidder should be registered in CREDA for FY 2018-19.
- E-2 Bidder should have their own office cum service center with proper facilities and staff in the state of Chhattisgarh.
- E-3 Bidder shall have direct experience of Supply, installation & commissioning of minimum 500 KW Solar Projects; a list and Performance Certificate issued by Govt/Govt Undertaking shall be mandatory to submit as a proof for the same.
- E-4 Bidder will have to submit a sample of Solar Tree along with the FEA report of solar tree structure certified by a registered structural engineer at the office of Chief Engineer, CREDA on or before submitting the technical bid.
- E-5 Bidder must have a positive net worth as on 31-03-2018.
- E-6 Bidders shall have an overall annual turnover of ₹ 10.00 Crore of last three Financial Years in solar projects ending on 31st March of each FY i.e. FY 2015-16, FY 2016-17, FY 2017-18 in SPV Projects. Bidder coming into existence after 2015-16 must have an overall annual turnover of ₹ 10.00 Crore
- E-7 Bidder will have to submit audited copy of balance sheet certified by a registered chartered accountant as a proof for point no. E-5 and E-6.
- E-8 The Bidder should have valid GST registration certificate. A copy of which should be enclosed
- E-9 Authorization of person representing Bidder from Director / Proprietor / Partner of the Firm/ Company of the Bidder .
- E-10 Bidders who are Blacklisted by CREDA or any other Govt Agency/ Department / UT, will not be allowed to participate in this Bid. System integrator whose registration has been suspended by CREDA due to bad performance or other reasons, shall not be eligible to participate in Price Bid.
- E-11 Bidders who has any litigation pending in any court with CREDA on the date of opening of the Bid shall not be eligible for this Bid.
- E-12 Any information/data submitted/rendered by the applicant/Bidder if found false/forged/wrong would entitle CREDA to reject/cancel the Bid submitted by Bidder.

F. INSTRUCTIONS TO THE BIDDERS

1. The Bidder is expected to examine all instructions, forms, terms and specifications as mentioned in the Bid document. Failure to furnish all information required by the Bid documents or submission of a Bid not substantially responsive to the Bid Document in every respect will be at the Bidder's risk and is likely to result in out-right rejection of the Bid.
2. **LOCAL CONDITIONS:**

It shall be imperative on each Bidder to fully inform him of all local conditions and factors, which may have any effect on the execution of the works covered under these documents and specifications. AGENCY shall not entertain any request for clarifications from the Bidder, regarding such local conditions.
4. **CLARIFICATION OF BID DOCUMENTS:**
 - A. A prospective Bidder requiring any clarification of the Bid Documents may contact AGENCY in writing or by Fax at the AGENCY's mailing address indicated in the Invitation for Bid.
 - B. Verbal clarifications and information's given by the AGENCY or its employees or its Representatives shall not be in any way entertained.
5. **AMENDMENT OF BID DOCUMENTS:**

At any time prior to the submission of the Bid or prior to the opening of the financial Bid the AGENCY may, for any reason, whether at its own initiative or in response to a clarification requested by the Bidder, modify the Bid documents by amendments.
6. **BIDDING PROCESS-** For ease of accessing the e-bidding website and registration the following is to be done by bidder –
 - A. Visit <http://www.cspc.co.in>
 - B. Click on e-bidding button on right hand side of the page.
 - C. The user will be directed to e-bidding page where all information regarding registration is available along with helpline details.
 - D. The Bidder must submit attested copies of all legal documents pertaining to the constitution of their Concern as applicable, along with the Tender, to authenticate their identity, such as affidavit of Sole Proprietorship/Partnership Deed/Registration Certificate/ Certificate of incorporation of the Company/Memorandum of Association of the Company and Power of Attorney authorising a person to represent the firm in all matters with respect to the Bid.
 - E. Price Bid shall be submitted online only at <http://www.cspc.co.in> however technical bid will have to be submitted in hard copy. Bid Documents (including Technical Bid and samples) must reach At Office of Chief Engineer (RE – III), Head Office, CREDA latest by 11.30 AM on 22.02.2019. Tenders submitted after scheduled time and date shall not be considered.
 - F. Technical Bid Documents should be submitted in prescribed manner in separate envelopes duly super scribed and placed as follows- (A)Bid Fees and EMD , (B) Eligibility Documents as per point E(1) to E(12) mentioned above (C) Technical Bid and Complete bid document in original duly signed by authorized signatory on each & every page of the bid document.
 - G. The envelopes must be clearly marked as “(A)Bid Fees and EMD /(B) Eligibility Documents / (C) Technical Bid and Complete bid document in original /of “**BID DOCUMENT NO 26217/CREDA/E-BID/RE-03/Solar Tree/2019 Date 08-02-2019 DUE ON 22.02.2019**”.
7. The Specifications of Solar Tree should be as specified in the bid.

8. Bidder shall have to submit details of GST & PAN registration numbers issued by the appropriate authority
9. The documentary evidence for meeting the eligibility criteria must mandatorily be submitted along as per check list with bid in prescribed manner.
10. Each offered solar module should have RFID & I-V curve measured with a sun simulator of a SPV Module Manufacturer reregistered/approved by MNRE with record of suitable calibration reference, as per guidelines of MNRE.
11. Bidders must enclose the safety procedure & manual.
12. When Technical Bid Documents & Eligibility documents are delivered through messenger, it should be submitted at Office of Chief Engineer (RE - III), Head Office, CREDA latest by 11.30 AM on 22.02.2019. Nobody is authorized to receive or grant receipt for tender delivered on behalf of CREDA.
13. Bidder should quote their rates considering variation of site conditions, variation in price of different components and keeping the quantum and quality of work in mind. If CREDA anticipates that rate is abnormally low or high, CREDA shall have liberty to amend the rates or reject the bid.
14. **VALIDITY:** Full descriptive particulars and complete specifications should accompany the offer. Offers should be kept open for acceptance for at least three months from the date of opening. After finalization of this Bid the approved rates shall be valid till one year from the date of award; however CREDA shall have liberty to increase or decrease this validity if needed.
15. 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 outrightly without assigning any further reasons.
16. 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 offer. In case of any corrections / alterations in the Bid, the Bidder should attest the same; otherwise Bids may not be considered.
17. CREDA reserves the right (i) to reject or accept any or all tenders wholly or partly without assigning any reason on the grounds considered advantageous to CREDA, whether it is the lowest tender or not and (ii) to split the quantities against the tender on more than one firm for the same items/ work. No reason will be assigned by CREDA for this and will be binding on the bidders. The bidder who had quoted the lowest price shall be preferred for placing order. Due to large quantum of work & limitation of the time period for completion of the work CREDA shall take consent from more than one bidder if they agree to work on rates standardized by CREDA. CREDA may undergo agreement with those eligible bidders who give consent to work on rates standardized by CREDA and may place work orders to them. Rates approved through this tender may be standardized for all eligible tenders to work in year 2018-2019 & 2019-20 and shall be valid till 31-03-2020. However CREDA reserves right to curtail or extend this period.

18. Offers through Telegraph/ Fax/Emails or open offers etc. received shall be summarily rejected.
19. All the Bidders shall essentially indicate the break-up of prices as shown in Price Bid. In case any of the charges are not included in the quoted prices, the same shall be clearly shown as extra, indicating specifically the rate/scale of such charges. The lowest prices quoted shall be considered.
20. **BID DOCUMENT FEE AND EARNEST MONEY:**
Each bidder should submit Bid Document Fee and earnest money 5 Lakh for participating in bid in the form of Demand Draft/ or RTGS/NEFT as mentioned in the NIT of "BID document NO. **26217/CREDA/E-BID/RE-03/Solar Tree/2019**", Date **08-02-2019**, in a separate envelope else they will summarily be rejected and returned. Bid Document Fee, EMD submitted in any other form e.g. Cash/Bank Guarantee etc shall not be accepted. [Exemption from EMD shall be given only to those SSI units of Chhattisgarh State who submit the competency certificate on which it should be clearly mentioned that, "the company registered in Chhattisgarh for manufacturing of that particular product"]. CREDA Competency Certificate will not be considered as EMD for this Rate Contract Bid.
21. **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 within stipulations, if he is so communicated within the validity period of the offer, the full amount of earnest money shall be forfeited and Bidder will be debarred from future business with CREDA. CREDA's decision in this respect will be final and binding on the Bidder.
22. **PRICE:**
The prices quoted should be firm and F.O.R. destination excluding GST payable on the bill of supply and installation / services. GST as applicable on the date of billing shall be paid additionally as per applicable rate over the above quoted prices.
23. **ENGINEERING DOCUMENT & TEST CERTIFICATE:**
Bidders will have to submit Engineering Documents with technical details, drawings, Specifications & Performance Report from any certified laboratory.
24. **SAMPLES:**
If Require CREDA may inspect the consignment before dispatch of the material at shall be delivered/ accepted as per the scope of work and specifications, as get it tested in accreted laboratory at its own cost.
25. **TAX OBLIGATIONS:**
TDS for Income Tax, GST, Civil Work etc shall be recovered under various acts and deposited with the appropriate authority. Eligible Bidder will have to submit break up of cost and taxes before execution of agreement with CREDA, so as to ensure tax deposition as per Govt. Rules accordingly. .

26. **JURISDICTION OF THE COURT:**

Any dispute arising out of the contract shall be subject to the jurisdiction of court at Raipur, Chhattisgarh.

G. 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.

CREDA shall mean the Chhattisgarh State Renewable Energy Development Agency represented through the CEO.

Work shall mean any work entrusted to the Bidder as mentioned in the scope of work and sanction order.

The "Engineer in charge" shall mean the Engineer or Engineers authorized by CEO, 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 system.

"The Eligible SI/Bidder" shall mean the Bidder awarded with the contract or their successors and permitted assigns. Contract Price shall mean the sum named in or calculated in accordance with the provisions of the contract as the contract price. General Conditions shall mean the General conditions of Contract.

"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 eligible SI/Contractor from time to time, as well as all samples and pattern, if any,

"Month" shall mean calendar month. "Writing" shall include any manuscript, typewritten, printed or other statement reproduced in any visible form whether under seal or written by hand.

2. **CONTRACT DOCUMENT:**

The term "Contract" shall mean and include the General conditions, specifications, schedules, drawings, sanction 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.

3. **MANNER OF EXECUTION:**

Execution of work shall be carried out in an approved manner as outlined in the technical specifications or where not outlined, in accordance with desired Specifications laid down by CREDA, to the reasonable satisfaction of the Engineer.

- i) The eligible SI shall conduct a detailed survey of site and submit Application of Beneficiary along with Processing Fee, necessary documents and survey details in concerned District Office of CREDA in prescribed manner.
- ii) District / Regional Office CREDA shall examine these reports and after satisfaction forward these to concerned Chief Engineer, RE-03 of Head office of CREDA for approval.

- iii) The SI/Contractor shall start work within 15 days after the date of issue of work Order. Work order will be given to the chosen System Integrator only after execution of the agreement with CREDA.
- iv) All the materials required for supply of Solar Trees as per Work Order issued shall be kept at site in the custody of the SI/Contractor. CREDA shall not be responsible for any loss or damage of any material during supply/ installation.
- v) All the electrical works (if needed) should be done as per Indian electricity Act. The persons engaged for carrying out electrical works should have a valid license of required category accordingly.
- vi) After installation and joint inspection will be done in presence of beneficiary, SI/Contractor and CREDA and after successful commissioning of Solar Trees and its approval from CREDA a JCC will be signed and the claim will be forwarded for payments as per guidelines and procedures of CREDA.

4. VARIATIONS, ADDITIONS & OMISSIONS:

CREDA shall have the right to alter, amend, omit, split or otherwise vary the quantum of work, by notice in writing to the SI/Contractor. The eligible SI/Contractor 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/Contractor.

5. INSPECTION DURING ERECTION:

The Engineer in Charge or his authorized representative (s) shall be entitled at all reasonable times to inspect and supervise and test during installation and commissioning. Such inspection will not relieve the eligible SI/Contractor from their obligations under this contract. Material can be inspected before dispatch by the authorized representatives of CREDA at the factory at the cost of the eligible SI, if desired by CREDA.

6. COMPLETION OF WORK:

Time being the essence of contract, all works specified in the work orders shall be completed within the time schedule prescribed in the Sanction order.

7. ELIGIBLE SIs DEFAULT LIABILITY:

CREDA may by written notice of default to the eligible SI/Contractor, terminate the contract in circumstances detailed hereunder:

- (a) If in the opinion of the CREDA, the eligible SI/Contractor fails to complete the work within the time specified in the sanction order or within the period for which extension has been granted by CREDA to the eligible SI/Contractor.
- (b) If in the opinion of CREDA, the eligible SI/Contractor 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 engage another eligible SI/Contractor or agency upon such terms and in such a manner as it may deem appropriate and the eligible SI/Contractor 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 Trees 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.

- (d) In the event CREDA does not terminate the contract as provided in paragraph (a) the eligible SI/Contractor shall continue performance of the contract, in which case he shall be liable to CREDA for penalty for delay as set out in this Bid document until the work is completed.
- (e) The maximum liability of the bidder is limited to 100% of contract value.

8. FORCE MAJEURE:

The eligible SI/Contractor 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, naxal problems, acts of government, cyclone, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes provided that the contract, shall within 10 (ten) days from the beginning of such delay notice the CREDA in writing of the cause of delay. CREDA shall verify the facts and grant such extension as facts justify. Delay in supply of any accessories of Solar Trees by the related vendors, to whom the Bidder has placed order, shall also not be treated as force majeure.

9. REJECTION OF WORKS:

In the event of any of the material supplied/ work done by the eligible SI/Contractor 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/Contractor to rectify the same. The eligible SI/Contractor on receipt of such notices shall rectify or replace the defective material and rectify the work, free of cost. If the eligible SI/Contractor fails to do so, CREDA may,

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

10. 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 agree to extend the contract/delivery date of the Solar System as may be reasonable but without prejudice to other terms and conditions of the contract.

11. MAKES OF EQUIPMENTS TO BE USED IN THE WORK:

The eligible SI has to ensure that equipments as per Technical Requirements of guidelines of CREDA as complied with. The eligible SI/Contractor has also to ensure that he will use only components of approved vendors of CREDA. The material/works for which CREDA/MNRE or BSI 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. Test certificates for all major equipments should be submitted to the engineer-in-charge of the works before installation of the same.

12. WARRANTEE PERIOD AND POST INSTALLATION SERVICES:

The work done/ material supplied by the eligible SI/Contractor should be warranted for satisfactory operation and against any defect in material and workmanship including Solar Tree, module, battery etc. and other balance of equipments, at least for a period of 5(five) years, from the date of commissioning of the Solar Tree including other works as per scope of work. For complete Solar Tree warrantee on SPV Modules shall be for 10 (ten) years from the date of commissioning of the Solar Tree 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. The above warrantee certificates shall be furnished to the CREDA for approval. Any defect noticed during this period should be rectified by the supplier free of cost upon written notice from CREDA provided such defects may be due to bad workmanship or bad materials used. The warrantee period shall be extended by the period during which the plant remains non-operative due to reasons within control of the eligible SIs. This warrantee must be an unconditional onsite warrantee and the eligible SI/Contractor will have to replace the defective material within 7days positively from the date of information given to him. Care should necessarily be taken to make the Solar Trees operational, once the reporting of the fault/non operational status is done, within a week. If the Solar Trees is not made operational within 7 days CREDA may rectify the same at the cost of SI, and the warrantee period shall be extended for a month for the same. This warrantee must be an unconditional onsite warrantee and the eligible SI/Contractor will have to replace the defective material within 7 days positively from the date of information given to him. System Integrators shall have to establish their service stations in the allocated area 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 Trees supplied by them. SI/Contractor shall have to give a toll free number to register complaints.

13. TERMS OF PAYMENT:

The following terms of payment shall apply for the Bid: -

- a. 95% of the eligible payments as per the work order after satisfactory completion & performance test of Solar Trees at site with proper handing over.
- b. Balance 05% of the eligible payments shall be retained by CREDA as Security Deposit for a period of 60 months. However the same may be released to SI/contractor on submission of TDR (duly pledged in favour of CREDA) of equivalent amount issued by a Scheduled Bank in prescribed format valid for a period of at least five years issued by a scheduled bank.
- c. GST shall be paid extra as applicable on the date of billing.

14. PENALTY FOR DELAY IN COMPLETION OF CONTRACT:

If the eligible SI/Contractor fails to complete supply, testing and commissioning etc, within the phased time schedule specified in the sanction order or any extension granted there to, CREDA will recover from the eligible SI/Contractor as penalty a sum of one percent (1.0%) of the system price of the uncompleted portion of the work for each

calendar month of delay or part thereof. For this purpose, the date of taking over shall be reckoned as the date of completion. The total penalty shall not exceed 5% (five percent) of the cost.

Penalty may be recovered from payments due or by invocation of performance security. CREDA may also debar the SI from future business for upto 3 years in case of non performance of work in time limit.

15. PERFORMANCE SECURITY:

The Performance Security shall be 5% of the eligible payments and shall be deposited in manner under clause no. 13. For the purpose of 13(b) the EMD may be considered to be converted into part of performance security. EMD shall be refunded only upon submission of at least equal amount towards Performance Security or else EMD shall be deemed to be converted into Performance Security.

- 16. INSURANCE:** The eligible SI/Contractor shall arrange insurance coverage for the materials and Solar Trees at his/ beneficiary's custody for the work under execution and successful commissioning and subsequent handover to the beneficiary. The eligible SI/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.

17. PENALTY DUE FROM THE ELIGIBLE SI/CONTRACTOR :

All cost of damages for which the eligible SI/contractor is liable to the CREDA, will be deducted from any money due to the eligible SI/ Contractor including the Security Deposit.

- 18. ELIGIBLE SI'S RESPONSIBILITY:** Notwithstanding anything mentioned in the specifications of subsequent approval or acceptance of Solar Trees by CREDA, if any, the ultimate responsibility for satisfactory performance of the entrusted work shall rest with the eligible SI/Contractor. If in any case the eligible SI/Contractor does not complete the work as per the sanction orders issued to them then CREDA may take over the task & complete the project at the cost of eligible SI/Contractor.

- 19.** Bidder shall have to submit an authorization certificate from the registered vendor of CREDA in regards to obtain materials of Solar Tree, also bidder will not be authorized to change the vendor for obtaining material without getting permission from CREDA.

- 20.** In case, the eligible contractors shall not complete the allocated works within time limit, CREDA will have discretionary power to cancel and award the work to any other experienced SI/contractors also as and when required.

21. RESPONSIBILITY TO RECTIFY THE LOSS AND DAMAGE:

If any loss or damage occurs to the work or any part thereof or materials/ plant/ equipments for incorporation therein the period for which the eligible SI/Contractor is responsible for the cause thereof or from any cause whatsoever, the eligible SI/Contractor 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. The eligible SI/Contractor shall also be liable for any loss or damage to the work/ equipments occasioned by him in course of any operation carried out to him during performing the contract.

22. RESPONSIBILITY TOWARDS THE WORKMAN OR OUTSIDERS:

The eligible SI/Contractor 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 Sanction order. The eligible SI/Contractor 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. All the expenditure including treatment or compensation will be entirely borne by the eligible SIs. The eligible SI/Contractor shall also be responsible for any claims of the workers including PF, Gratuity, ESI & other legal obligations.

23. NON-ASSIGNMENTS:

The eligible SI/Contractor shall not assign or transfer the sanction orders issued as per this contract or any part thereof without the prior approval of CREDA.

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/Contractor of his obligations for due performance of the contract.

25. SETTLEMENT OF DISPUTES THROUGH ARBITRATION:

- i. Except as otherwise specifically provided in the contract, all disputes concerning questions of fact arising under the contract shall be decided by the Chief Executive Officer (CEO), CREDA provided a written appeal by the eligible SI/Contractor is made to CREDA. The decision of the CEO, CREDA shall be final and binding to the all concerns.
- ii. 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.

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.

Compliance with Labour Regulations-During continuance of contract, the contractor shall abide at all times by all applicable existing labour enactment and rules made there under, regulations, notifications and bye laws of state and central Govt or local authority that may be passed/issued or may be issued.

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:

- i. Any notice to the eligible SI/Contractor under the terms of the contract shall be served by registered mail to the registered office of the eligible SI/Contractor or by hand to the authorized local representative of the eligible SI/Contractor and copy by post to the eligible SI's principal place of business.
- ii. Any notice to CREDA shall be served to the CEO, CREDA, Raipur in the same manner.

29. **SECRECY:**
The eligible SI/Contractor 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/Contractor shall have to enter into an agreement with the Director/CEO, CREDA in the approved contract agreement form within 07 days of the receipt of call from CREDA.
31. **BID EVALUATION CRITERIA**
- a. Offer of only those parties who are found qualifying based on Technical Evaluation Criteria will be taken into further consideration and prices of only those parties qualifying based of these criterion will be opened.
 - b. Bids shall be evaluated on the basis of lowest total supply rates without GST.
 - c. CREDA retains right to negotiate rates with L-1 Bidder.
 - d. Conditional Bids shall not be accepted.
 - e. However CREDA shall have rights and liberty to call any /other parties to work on approved rates as and when required in accordance with quantum of work and scheduled time limits for completion of targets.
32. **ALLOCATION OF TARGETS AND AREA OF WORK**
- (a) L1 bidder will be given preference for allocation and they will be awarded min. 25% of the Work.
 - (b) Initially all the eligible SI will be awarded with equal nos of work. However further allocations shall be made on the basis of their performance subsequently.

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 Bidder)

SCOPE OF WORK

1. Designing, supply & comprehensive operation & maintenance (COM) for consecutive five years, of Solar Trees anywhere in Chhattisgarh State in accordance to the design and specifications approved by CREDA, with warrantee norms as mentioned in section "WARRANTEE PERIOD AND POST INSTALLATION SERVICES" on page no. 15 of the tender document on turnkey basis. Bidder shall have to take approval of the engineering documents from CREDA prior to commencement of the work. Five years warrantee shall be required for each of the system after successful commissioning and proper handing over.
2. The scope of work shall also includes the followings :-
 - Detailed planning of time bound smooth execution of project.
 - Design, Manufacturing & supply of Solar Trees as per design and specifications approved by CREDA.
 - Providing User Manuals and Warrantee Cards to beneficiary / CREDA.
 - SI shall have to submit JCCs within 15 days of supply, installation and commissioning of Solar Trees in concerned District Offices of CREDA.
 - Performance testing of the complete system.
 - Onsite Warranty of the system for Five year faultless operation, assure inventory for maintenance.
 - Providing Prompt Service Facilities to customers/ beneficiaries.
 - Risk liability of all personnel associated with implementation and realization of the project.
 - Training of at least two persons nominated by user, on the various aspects of design and maintenance of the offered system after commissioning of the system.
 - The eligible SI shall maintain sufficient inventory of the spares to ensure that the system can be made functional within forty eight hours from the communication of breakdown of the system during currency of the warrantee period.
 - The contractor 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 annual power generation can be estimated for monitoring of the performance of the system. CREDA shall examine the data of generation and ascertain if the generation is adequate with reference to the capacity of the Solar Systems.
 - Performance Guarantee Test: Successful performance guarantee test to demonstrate the rated capacity of Solar Trees as per CREDA's norms shall have to be conducted by SI in presence of representatives of CREDA, if required.

H. Technical Specifications of Solar Trees

Specifications of Solar Trees should be on two categories:

- a. 1200 wp Solar Module
- b. 3000 wp Solar Module

1.0 Solar Tree Structure:

1. The structures shall be designed as per the design given in the tender document for Design of Optimized Solar Tree for the various locations at Chhattisgarh State.
2. The structure shall be designed to allow easy replacement of any module and shall be in line with the site requirements.
3. The foundation for Solar Tree structure shall be preferably 1:2:4 PCC constructions or any other combination based on the local site condition requirement for which design details shall be submitted and approved before start of work.
4. The support structure design and foundation shall be designed to withstand wind speed up to 150 kmph for which design details and drawings shall be approved.
5. In general, bolt, nuts, shims, Fasteners and other hardware should be of G.I. and anti theft nut bolts for module mounting structures shall be of stainless steel SS 304.
6. Structure should be designed so as to make the solar panels easily accessible for cleaning/ wiping.
7. The solar tree structure should also contain enclosure made of Stainless Steel SS 304 for housing batteries and charge controller to prevent it from rain and other natural calamity. The battery housing shall consist of a platform which may be used for sitting purposes.
8. All the drawings/design must be approved from CREDA's officials before the start of work.
9. Entire structure should be painted with red oxide first and then double coated with epoxy paint.
10. Bottom area of the Solar tree leaves where solar module will be mounted, should be covered with G.I. wire-mesh.

2.0 Batteries:

1. The Battery shall be Lithium-iron-phosphate
2. Load details & battery Ah should be as below:

SN	Type Of Solar Tree	Module capacity (In Wp)	System voltage (In Volt)	Operational Load (in Wp)	Battery Ah
1	Solar Tree - 1200 Watt	1200	25.6	200	300
2	Solar Tree - 3000 Watt	3000	51.2	500	400

3.0 EARTHING SYSTEM

3.1 It shall be as per IS : 3043-1987 (Code of practice for earthing) & latest IEC standards

3.2 It should be as per following specifications :

SPD'S FOR DC POWER SUPPLY:

Surge Protection Device's are to protect the PV modules as well as the other electrical / electronic systems from transient over voltages created due to lightning and to reduce insulation breakdowns due to lightning. **The SPDs shall be of 3 no's of pluggable type installed in a star connected common base for easy replacement of faulty arrester also with a remote indication.** The SPD's are tested and approved from VDE / KEMA according to **IEC 61643 standard requirements and** for the following parameters are to be used.

Type of connection: Between Positive, Negative and Earth in star connection

Voltage: up to 1000 volts DC

Maximum Discharge current: 40 KA (8/20 μ S)

Nominal Discharge Current: 20 KA (8/20 μ S)

Voltage Protection Level: < 2.5 KV (for 600 volt system)
<4.0 KV (for 1000 volt system)

Response Time: <25 nS

LIGHTNING PROTECTION SYSTEM& SURGE PROTECTION SYSTEM:

Lightning Protection System shall be in accordance with IS/IEC 62305-3& IS 3043. The protection system should be of LPL 3 according to IS/IEC62305 for a maximum lightning current of up to 100 KA (10/350 μ S). The protection system consists of a 4 meter Aluminum lightning rod ,Tapered in construction with16mm tubular &10mm soilldia for top 1 meter. The lightning rod shall be placed min 1 meter away from PV panel. The lightning rod shall be installed/supported using ready-made frost resistant concrete stone against wind loads.Lightning rod shall be supplied along with a stainless steel clamp suitable to connect 8-10mm conductor as down conductor. The number of lightning rods required shall be calculated based on the angle of protection explained in IS IEC 62305-3.

Each metallic supports of the PV Panel should be interconnected and finally to the earthing system to form a perfect Equipotential bonding system.

EARTHING SYSTEM:

Earthing system consists of Equipotential Bonding Bar (EBB), Vertical earth pits and horizontal earth wires interconnecting every metal support of the PV panel. Each array structure of the PV yard should be connected to the horizontal earth wire. Provision should be kept inside the array field. Provision should be kept for shorting and grounding of the PV array at the time of maintenance work. All metal casing/shielding of the plant should be thoroughly grounded in accordance with Indian electricity Act/IE Rules. Earth Resistance should be tested after earthing by calibrated earth tester.

The vertical earth pit consists ofEarth electrode, Earth enhancement material, Earth pit, inspection cover and all other associated accessories.

EARTH ELECTRODE:

The earth electrode shall be made of high tensile low carbon steel circular rods, molecularly bonded with copper on outer surface to meet the requirements of IEC60364-5-54 and IEC 62561-2. Such copper bonded steel rod is preferred due to its overall combination of strength, corrosion resistance and cost effectiveness. Only UL certified rods need to be used

- The earth electrode shall be minimum **14 mm diameter and minimum 3000 meters** long.
- The minimum copper bonding thickness shall be of **250 microns**.
- Earth resistance must be less in value for individual earth pits. In places where the values of individual earth pits are more, multiple earth rods are to be installed to get a lesser resistance.

EARTH ENHANCEMENT MATERIAL:

Earth enhancement material is a superior conductive material that improves earthing effectiveness, especially in areas of poor conductivity (rocky ground, areas of moisture variation, sandy soils etc.). It improves conductivity of the earth electrode and ground contact area. It shall have following characteristics-

- Have high conductivity, improves earth's absorbing power and humidity retention capability.
- Non-corrosive in nature having low water solubility but highly hygroscopic.
- Necessary certificate **tested and passed as per IEC 62561-7** from National/ International lab for the **resistivity, Sulphur determination, TCLP, Corrosion (both dry & wet) shall also be submitted.**
- Suitable for installation in dry form or in a slurry form.
- Shall not depend on the continuous presence of water to maintain its conductivity.
- Shall be permanent & maintenance free and in its "set form", maintains constant earth resistance with time.
- Shall not dissolve, decompose or leach out with time.
- Shall not require periodic charging treatment nor replacement and maintenance.
- Shall be suitable for any kind of electrode and all kinds of soils of different resistivity.
- Shall not pollute the soil or local water table and meets environmental friendly requirements for landfill.
- Shall not be explosive.
- Shall not cause burns, irritation to eye, skin etc.

BACKFILL MATERIAL:

The excavated soil is suitable as a backfill but should be sieved to remove any large stones and placed around the electrode taking care to ensure that it is well compacted. Materials of corrosive nature such as salt shall not be used.

CONSTRUCTION OF UNIT EARTH PIT: -

For areas with normal soil, earth rod to be driven deep to get the desired value. For places with rocky soil, following method can be used

- A hole of 75 mm dia shall be augured /dug to a depth of about 1100 mm.
- The earth electrode shall be placed into this hole.
- It will be penetrated into the soil by gently driving on the top of the rod. Here natural soil is assumed to be available at the bottom of the electrode so that min. 150 mm of the electrode shall be inserted in the natural soil.
- Earth enhancement material (minimum approximate 5 kg) shall be filled into the augured/dug hole in slurry form and allowed to set. After the material gets set, the diameter of the composite structure (earth electrode + earth enhancement material) shall be of minimum 100mm dia covering entire length of the hole.
- Remaining portion of the hole shall be covered by backfill soil, which is taken out during auguring /digging.

All connections to the earth electrode shall be with **a stainless steel clamps (to avoid corrosion at connection joints)** for taking the connection to the PV support structure/other earth connections / Equipotential bonding bars and to other earth pits, if any.

INSPECTION CHAMBER:

For the earth pit should be strong enough and easily accessible for reading values with a minimum dimension of 250 X 200 mm size, with cover and should be able to withstand load up to 5kN.

HORIZONTAL EARTH CONDUCTOR:

Horizontal earth conductor is for the interconnection of all metal supports and to create Equipotential bonding. The earth conductor should be placed at least 50 CM's below the surface. Galvanized Ironstrip with a minimum cross sectional area of 75 mm minimum with a coating thickness of 70 microns is recommended. The conductor should be of continuous running with minimum interconnections. All fasteners used should confirm to IEC 62561 designed for this application.

3.0 Other technical specification

3.1 Solar Tree-1200w			
Onebox-2-1H			
1	Battery Capacity	2000	Wh
2	Battery Type	LiYFP04	
3	Inverter	1200	VA
4	Output Voltage	230	V
5	Output Frequency	50	Hz
6	Input Voltage	120-180	V
7	Conversion Efficiency	99	%
Solar Panel			
1	Maximum Power	250	W
2	Operating Voltage	24	V
3	Operating Current	7.14	A
4	Open Circuit Voltage	35	V
5	Short Circuit Current	7.75	A
1	Dimensions	1660x990x42	mm
2	Weight	20.5	Kg
3	No of Cells	72	cells
9	No of Panels	5	nos

3.2 Solar Tree-3000w			
Onebox-4-1H			
1	Battery Capacity	4000	Wh
2	Battery Type	LiYFP04	
3	Inverter	3000	KVA
4	Output Voltage	230	V
5	Output Frequency	50	Hz
6	Input Voltage	150-265	V
7	Conversion Efficiency	99	%

Solar Panel			
1	Maximum Power	250	W
2	Operating Voltage	36	V
3	Operating Current	7.14	A
4	Open Circuit Voltage	35	V
5	Short Circuit Current	7.75	A
6	Dimensions	1660x990x42	mm
7	Weight	20.5	Kg
8	No of Cells	60	cells
9	No of Panels	12	nos

1. SPV MODULE SPECIFICATION:

General Specifications of Solar module shall be in accordance with prevailing guidelines of MNRE, however the specifications of some components are also mentioned as follows –

1.1 Type and Quality

The total Solar PV array capacity shall be as specified in price schedule and shall be assembled with minimum 250 Wp (with minimum of 24 V) Multi/Mono Crystalline/MNRE approved solar modules with minimum 72 cells with minimum 15% Module Efficiency. The modules should be tested and certified by a Govt. of India authorized test centres or should conform to relevant IEC 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 SPVPP ordered.

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 of the following IEC/ equivalent BIS Standards for PV module design qualification and type approval: Crystalline Silicon Terrestrial PV Modules: IEC 61215 / IS14286

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, I_m , V_m and FF for the module
- (vii) Unique Serial No and Model No of the module
- (viii) Date and year of obtaining IEC PV module qualification certificate
- (ix) Name of the test lab issuing IEC certificate
- (x) Other relevant information on traceability of solar cells and module as per ISO 9000 series.

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 15 %.**

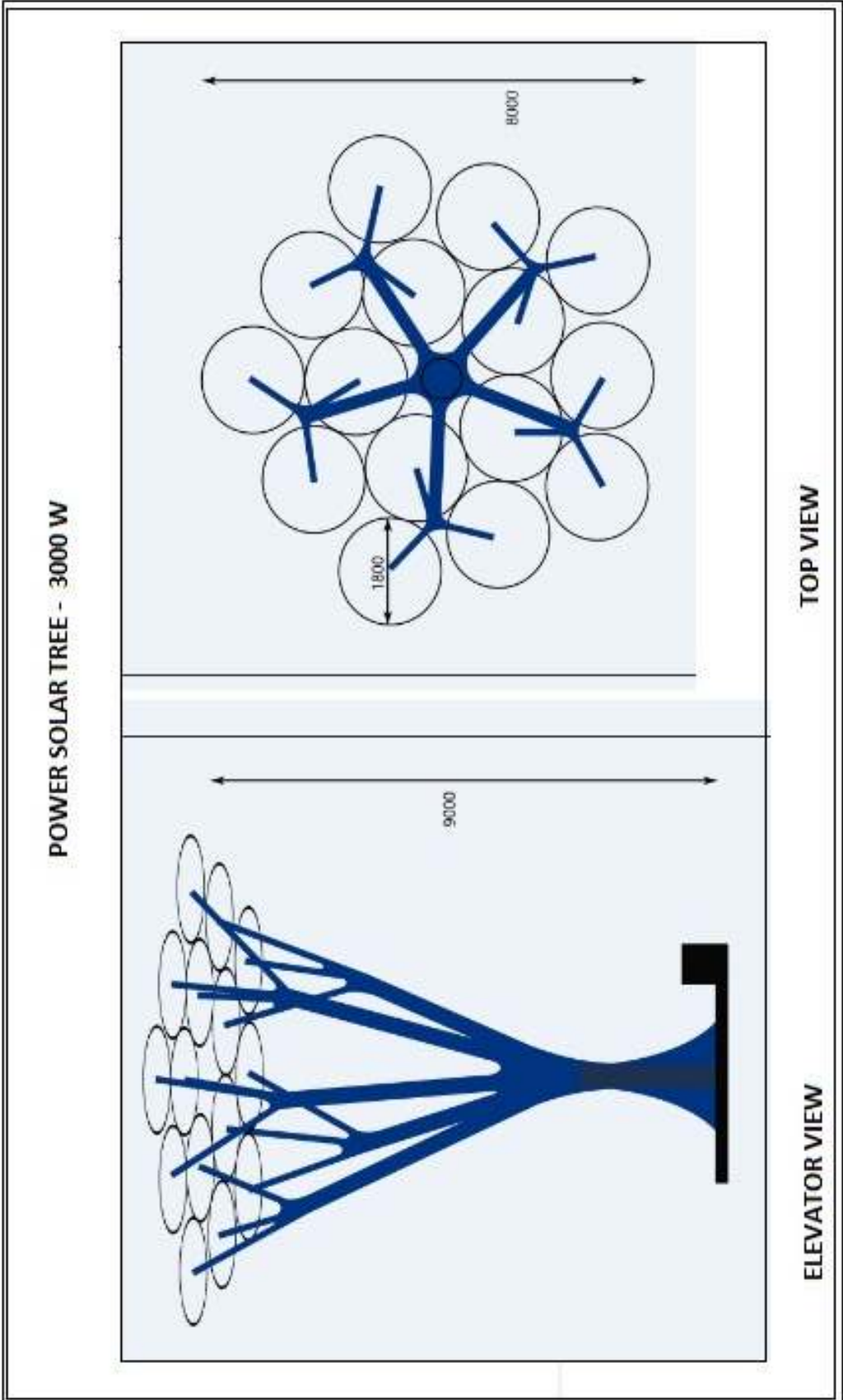
2. QUALITY AND WARRANTY:

- i. The Solar Tree will be warranted for a period of five years from the date of supply.
- ii. Warrantee on fetal heart rate monitor, LED Lamps, Universal cell phone charger, DC power outlets of Solar Tree warrantee shall be two year only from the date of supply
The PV module(s) will be warranted for a minimum period of 10 years from the date of supply.
- iii. The PV modules must be warranted for their output peak watt capacity, which should not be less than 90% at the end of Ten (10) years and 80% at the end of Twenty five (25) years.
- iv. The Warranty Card to be supplied with the system must contain the details of the system.

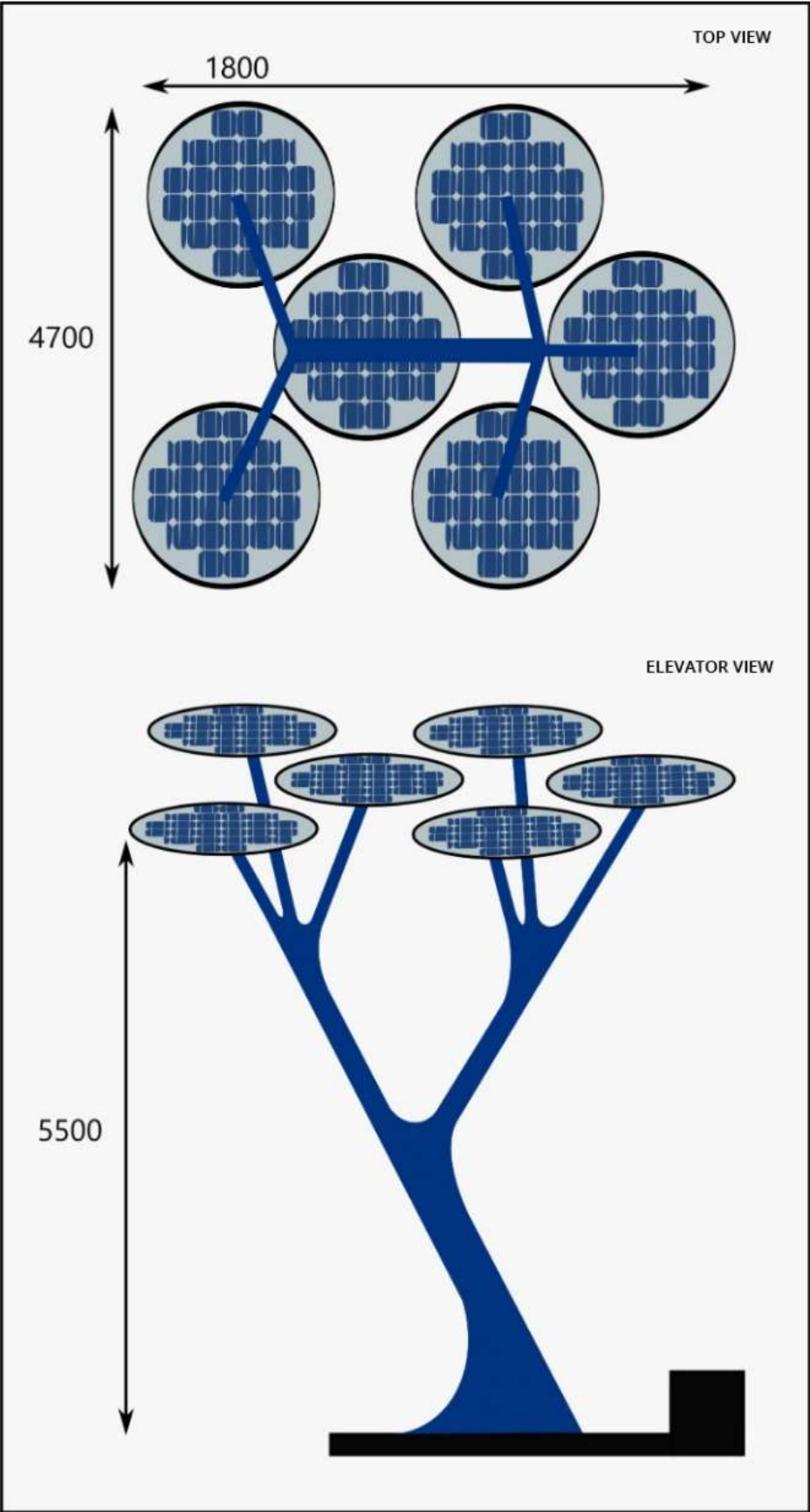
3. DO's and DONT's:

Name and address of the contact person for repair and maintenance, in case of non-functionality of the Solar Trees.

J. Symbolic Drawings & photographs of Solar Trees



h



K. PRICE BID.

Schedule of Rates for Solar Trees.

(As per Specifications & Scope of Work of

(E-BID DOCUMENT No. 26217/CREDA/BID/RE-03/Solar Tree/2019 Date 08-02-2019)

Design, Manufacturing & supply of **Solar Trees** including all allied works with five years on site unconditional warrantee & with five years comprehensive operation & maintenance contract at anywhere in Chhattisgarh State as per scope of work.

No.	Description	Rate/ Unit (without GST) in Rs.
1	Design, manufacturing & Supply of Solar Trees with 1200 wp Solar Module at anywhere in the state of Chhattisgarh.	
	Comprehensive Operation and Maintenance of Systems for five years	
2	Design, manufacturing & Supply of Solar Trees with 3000 wp Solar Module at anywhere in the state of Chhattisgarh.	
	Comprehensive Operation and Maintenance of Solar Trees for five years	
TOTAL		

Certified that rates quoted above are as per the requirement, specifications, 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 warrantee as mentioned in the bid document. The GST payable on the bill produced for payment to CREDA shall be paid in addition to above quoted price as per rate of GST applicable at the time of billing.

(No other cost will be claimed above the price quoted)

Name of the authorized Signatory:

Signature of the Authorized Signatory:

Seal of Company:

Date: