

**Central Wool Development Board,
Ministry of Textiles,
Govt. of India**

**TENDER FOR SUPPLY, INSTALLATION, TESTING AND
COMMISSIONING (SITC) OF 250 KWP,35 KWP,50 KWP
GRID CONNECTED ROOFTOP SOLAR PV POWER
PLANT AT VARIOUS LOCATIONS**

Volume-I Technical Bid

Volume-II Technical Specification

Volume-III Financial Bid

Volume – I: Technical Bid

INDEX

1. NOTICE INVITING TENDERS
2. ADDITIONAL INSTRUCTIONS TO PERSONS TENDERING & PRE-QUALIFYING CRITERIA
3. OFFLINE SUBMISSIONS OF DOCUMENTS (PHYSICAL SUBMISSION)
4. DECLARATION FORM
5. DECLARATION CERTIFICATE
6. GENERAL RULES AND DIRECTIONS FOR THE GUIDANCE OF CONTRACTORS
7. TENDER FOR WORK
8. TERMS & CONDITIONS OF CONTRACT

Central Wool Development Board, Ministry of Textiles, Govt. of India

First Floor, BSNL Building, Manji Ka Hatha, Paota, Jodhpur. 342 006 (Rajasthan)

Phone No.2616328 ,2433967-0291 -

E-mail :woolboard-textiles@gov.in Website :www.woolboard.in

CWDB/IWDP/WPS/CFC/Solar Procurement/2025-26/

Date-

1. NOTICE INVITING TENDER:

Tender Reference No.	:-	CWDB/IWDP/Solar Tender/
Name of Organization	:-	Central Wool Development Board, Ministry of Textiles, Govt. of India
Name of the Work	:-	TENDER FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING (SITC) OF 250,35,50 KWP GRID CONNECTED ROOFTOP SOLAR PV POWER PLANT AT VARIOUS LOCATIONS
Period of Completion (in Months)	:-	03 months from the date of notice to proceed, issued by CWDB (Including 1 month trail & run)
Defect Liability Period (DLP)	:-	12 months from the date of completion of the works.
Period of Comprehensive Maintenance in months	:-	12 months from the date of completion of the works
Bidding Type	:-	Two Bid System (Envelope – 1: Technical Proposal, Envelope -2: Financial Proposal) Both the proposals shall be submitted on CPPP portal
Bid Call (Nos)	:-	01
Tender Currency type	:-	Indian Rupees (INR)
Joint Venture	:-	Not Applicable
Rebate	:-	Applicable
Tender Fees	:-	Rs. 2000/- to be submitted in the form of Demand Draft.
Tender Fees payable to	:-	Central Wool Development Board, Jodhpur
Earnest Money Deposit (EMD)	:-	Rs. 5,00,000/-
EMD payable to	:-	Central Wool Development Board, Jodhpur

Security Deposit (INR)	<p>Security Deposit is required to be furnished by the Contractor as guarantee money for performance of the Contract and observance of Contract Conditions.</p> <p>Total security deposit of Estimated 1000 RS / KW of Quoted capacity by the successful Bidder shall be applicable.</p> <p><i>Security Deposit shall be submitted in following manner:</i></p> <p>Performance Bank Guarantee issued by Schedule Bank.</p> <p>:-</p>
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Uploading of Tender on CPPP portal and CWDB website	:-	30.12.2025
Site Visit Date & Time	:-	As per the Bidder convenience
Site Visit Venue	:-	<u>1. CSWRI, Avikanagar, Tonk, Malpura, Rajasthan 304501</u> <u>2. NRC YAK West Kameng District, Dirang, Arunachal Pradesh 790101</u> <u>3. NRC CAMEL Shiv bari Jorbeer, Jodhpur Bypass, Bikaner, Rajasthan 334001</u>
Pre-Bid Meeting Date and Time	:-	NA
Tender Document End Date & Time	:-	22.01.2026 & 6.00 PM
Opening Date & Time	:-	23.01.2026 & 10.00 AM
Last Date & Time for tender submission on CPPP portal	:-	22.01.2026 & 6.00 PM
Bid Validity Period	:-	90 days
Submission of certain documents etc. by RPAD / Speed Post/Hand delivery to the office of CWDB Jodhpur		Contractor should submit the Tender fee, EMD and Prequalification Document & other valid documents in physical form by R.P.A.D./ Speed Post/Hand delivery so as to reach Central Wool Development Board, Jodhpur by 22.01.2026
Officer inviting bid	:-	The Executive Director

Bid Opening Authority	:-	The Executive Director
Address	:-	Central Wool Development Board, Jodhpur, First Floor, BSNL Building, Manji Ka Hatha, Paota, Jodhpur. 342 006 (Rajasthan)
Contact Details	:-	Phone No.- 0291-2433967, 2616328 E-mail: woolboard-textiles@gov.in
Website:		www.woolboard.in

Executive Director
(CWDB)

General Terms and Conditions

- (1) Bidders can download the tender document from the CPPP portal and CWDB website (www.woolboard.in) only.
- (2) Bidders have to submit Bid online in two bid system, in given format only, by above given date and time.

ITEM RATE TENDER

2. ADDITIONAL INSTRUCTIONS TO PERSONS TENDERING & PRE-QUALIFYING CRITERIA

A. ADDITIONAL INSTURCTIONS TO PERSONS TENDERING

- i) **Competency of Tender** – No contract will be awarded except to responsible bidders capable of performing the class of works contemplated. Before the award of the contract, any bidder may be required to show that he has the necessary facilities, experience, ability and financial resources to perform the work in satisfactory manner within the time stipulated. Contractor may be required to furnish the department with the statement as to their experience and their financial status.
- ii) It is mandatory for the Tenderer to visit the site and satisfy himself as to the nature of all works, all existing roads, water-way and other means of communication and access to and from the site and work and the building that may be required for temporary purpose in connection with the construction, completion and maintenance of the works and must make his own inquiries as to work, yard sites and depot, and dumps and as to acquisition of such additional sites and areas as may be necessary

for temporary purpose for constructing, completing and maintaining the works.

- iii) The Bids shall be offered in open tender two bid system format only, on CPPP portal and CWDB website (www.woolboard.in) till the date and time specified in the tender notice. The tenders shall be received only under open tender two bid system.
- iv) Late tenders (i.e. tender received after the specified time of opening), delayed tenders (i.e. tenders received before the time of opening but after due date and time of receipt of tenders) and post tenders offers shall not be opened and considered at all.
- v) The tenders received after time & the date specified in the tender notice shall not be received by the concerned office.
- vi) **Payment:-** The tenderer must understand clearly that the rates quoted are for completed works and include all costs due to labour, scaffolding plant, supervision, service works, water, power, royalties and octroi etc., and to include all extras to cover the cost of night work if and when required and no claim for additional payment beyond the price/rates quoted will be entertained and the tenderer will not be entitled subsequently to make any claim on the ground of misrepresentation or on the ground that he was supplied with information given by any person (whether the member is the employee of CWDB or not). Any failure on his part to obtain all necessary information for the purpose of making his tender and filling the several prices and rates therein shall not relieve him from any risks or liabilities arising out of or consequent upon the submission of the tender.
- vii) Bidders can prepare and edit their offers number of times before tender submission date and time. After tender submission date and time, bidder cannot edit their submitted offer in any case. No written or online request in this regard shall be granted.

B. Contractors to please read this carefully:

- 1) If the contractor does not turn up to pay the Security Deposit and execute contract agreement within specified (or extended) time after intimation to him about acceptance of this offer, the earnest money paid for this work will be forfeited and according to clause -1 of this tender form, tenderer's tender shall be rejected and then according to aforesaid provision of tender, action to blacklist the contractor will be initiated without delay.
- 2) All pages of Schedule 'A' and 'B' and specifications should be signed by the Contractor.
- 3) All corrections, erasures and overwriting should be initialed by the Contractor.
- 4) In addition to the above, the tender will also be liable to be rejected outright if -
 - i. The bidder proposes any alteration in the work specified or in the time allowed for Carrying out the work or any condition or correction made in any code or mode of Schedule-B or Specifications.
 - ii. The bidder or the person authorized to sign on behalf of the bidder does not sign the bid offer.

C. Discrepancies and adjustment of Errors

Any error in quantity or amount in Schedule 'B' showing items of works to be carried out shall be adjusted in accordance with the following rules.

- a) In the event of a discrepancy between description in words and figures quoted by a tenderer in the rates column, the description in words shall prevail.
- b) In the event of an error occurring in the 'amount' column of the Schedule 'B' showing items of work, as a result of wrong multiplication of the unit rate and quantity; the unit rate shall be regarded as firm and multiplication shall be amended on the basis of the rate.
- c) All errors in totaling in 'amount' column in carrying forward totals shall be corrected.
- d) Any rounding of amount against "items" or in "totals" shall be ignored.

The tendered sum so altered shall for the purpose of the tender be substituted for the sum originally tendered and considered for acceptance.

- D.** Right is reserved to reject any or all tender(s) without assigning any reason (s).

In addition to the above, the tender will also be liable to be rejected outright if-

- a) The tenderer proposes any alteration in the work specified or in the time allowed for carrying out the work or any condition or correction made in any code or mode or Schedule 'B' or specifications.
- b) Any of the page of the tender is/ are removed or replaced
- c) All corrections, additions or pasted slips are not initialed by the tenderer.
- d) Any erasure is made by him in the tender and.
- e) The tenderer or in the case of a firm, each partner or the person holding the power of attorney thereof does not sign or signature is /are not attested by a witness on the space provided for the purpose.

E. PRE-QUALIFYING CRITERIA

1. SITE VISIT

Bidder(s) have to visit site to inspect and examine the site at his own cost and its surroundings and satisfy themselves before submitting their bids as to the nature of the work and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder(s) shall be deemed to have full knowledge of the site and no extra charge consequent on any misunderstanding or otherwise shall be allowed. **The bidder(s) shall be responsible for arranging and maintaining at his own cost for the all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents.** Submission of a bid by a bidder(s) implies that he has read this notice and all other contract documents and has made

himself aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work.

2. QUALIFYING CRITERIA: TECHNICAL BID SUBMISSION

The intending bidders must read the terms & conditions of tender documents carefully. He should only submit his bid if he considers himself eligible and is in possession of all the documents required.

The Technical Bid shall be consist of original copies of the following documents. All the documents must be serial wise as stated below along with check list.

(All documents should be notarized under qualification criteria)

FORMAT OF CHECK LIST

Sr. No.	Particular of Document	Yes	No	Page Nos. (from – to)
1.	Original Authorization Letter to sign the Tender.			
2.	Original Demand Draft- EMD (technical proposal)			
3.	Original Demand Draft (for Tender Fee- technical proposal)			
4.	Letter of Transmittal on bidder letterhead to submit Technical Bid.			
Eligibility criteria				
5.	Yearly sales Turnover and Audited Balance Sheet for Last 3 (Three) years , including Profit & Loss Statement ending on the financial year 2023-24. (Form-A)			

6.	The contractor should not have incurred any loss (profit after tax should be positive) in more than two years during last Three years ending 2023-24, duly audited by the Chartered Accountant. (Form-A)			
7.	Turnover: Average annual financial turnover of the bidder should be at least Rs. 1.5 Crore of work during the immediate last 3 consecutive financial years ending 2023-24. This should be duly audited by the Chartered Accountant. (Form-A)			
8.	<p>Tenderer / Company/ Bidder must have completed a minimum capacity of 250 KW Solar Work registered in Rajasthan.</p> <p style="text-align: center;">And</p> <p>Tenderer / Company/Bidder must have completed minimum two individual work of 100 KW capacity during last 3 years (necessary documents showing the proofs shall be submitted from the authorities/client/owner shall only be considered)</p>			
9.	The bidder should not be insolvent, in receivership, bankrupt or being wound up, not have had their business activities suspended. Accordingly, Bidder shall submit Solvency certificate with details of Financial Status i.e. Name of the Banker & Current Solvency Certificate (i.e. the solvency certificate shall be dated after the date of publication) from the Public sector Banker in original for 10,00,000/- . (Form-B)			

10.	Name, Address, details of the Organization, Name(s) of the Owner/Partners/Promoters and Directors of the firm / company. (Form-C)			
11.	Copy of PAN Number.			
12.	Copy of P.F. Registration			
13.	Goods and Service Tax (GST): Bidders are advised to get themselves registered for GST in at different place, which are mandatory, as per Govt. of India notification regarding GST. Accordingly, bidder shall submit relevant documents.			
14.	<p>The bidder should be an Indian Registered Company under Companies Act 1956/ Proprietorship / Partnership / Limited company private or public or corporation.</p> <p>Joint Ventures are not accepted.</p> <p>Copy of Certificate of Incorporation / Registration / Partnership Deed or any other relevant document, as applicable, should be submitted along with a copy of address proof.</p>			
15.	Bidder's Valid Electrical Contractor Registration Certificate A,B or C class registered in Rajasthan			
16.	Bidder should not be blacklisted/ debarred by any government/ semi government department/ PSU. Bidder should submit the declaration (Form-D) of not being ineligible for corrupt or fraudulent practices.			
17.	<p>Letter of understanding the project site on bidder letter Head (Form-E).</p> <p>The bidder will be responsible to avail stamp and signature of authorized representative of</p>			

	CWDB on Form-E, at the time of site visit. Form-E having stamp & signature of CWDB should be submitted as part of tender document and the same will be considered valid.			
18.	'No Deviation Certificate' in prescribed format on Bidder's Letter Head (Form-F) .			
19.	Information of Key Technical Representatives who is going to associate with the Project (Form- J) .			
20.	Details of the Equipment's / Machinery owned /hired by the Bidder for the Project (Form-H) .			
21.	Bidder shall submit Information on litigation history, liquidated damages, disqualification etc. in bidder Letter Head.			
22.	Power of Attorney duly authorized by a notary of Rs. 300/- Non-Judicial stamp paper public, if power is delegated for signing the Bid to another person by the Bidder.			

No information relating to financial terms of services should be included in the technical bid. Bids are to be submitted to determine that the bidder has a full comprehension of the tendered work. Where a bidder technical submittal is found non - compliant with the requirement or work, it may be rejected. This process is to assure that only technical acceptable bids are considered for the tendered work.

In the technical bid Bidder will have to submit sample of Solar module, structure material, Earthing material ,AC cable ,DC cable along with manufacturer details and testing certificate. Once the sample is approved w.r.t technical specifications, financial bid are opened for successful bidders.

Evaluation Criteria

The bidder will be technically qualified based on above mentioned Eligibility Criteria's. The financial Bid of only those Bidders who are technically qualified shall be opened. The Bid shall be evaluated on Least Cost Basis (LCS).

The participated bidders documents i.e. Completion certificate, Work Orders, solvency and other relevant documents shall be verified from the issuing authority.

3. OFFLINE SUBMISSIONS OF DOCUMENTS (PHYSICAL SUBMISSION)

The Bidder shall submit following Document offline also.

1. **Tender fees:** Rs. 2000/-, Demand Draft original in favour of “Central Wool Development Board, Jodhpur”.
2. **Earnest Money Deposit (E.M.D):** Rs. 500000/- only in form of demand draft in favour of “Central Wool Development Board, Jodhpur”.

NOTE: The submissions mentioned above shall be submitted on CWDB Jodhpur address mentioned in NIT as per date & time mentioned in NIT otherwise bids are liable to be rejected.

4. DECLARATION FORM:

- i. I / We hereby declare that I / We have visited the site and fully acquainted myself / ourselves with the local situations regarding materials, labour and other factors pertaining to the work before submitting this tender.
- ii. I / We hereby declare that I / We have carefully studied the conditions of contract, specifications and other documents of this work and agree for execute the same accordingly.

5. DECLARATION CERTIFICATE:

I / We hereby declare that my / our near relatives are not working with Central Wool Development Board, Jodhpur and we do not have any conflict of interest with any of the organizational, financial, contractual or other interests relating to the work under this Tender and shall maintain the integrity pact as per the Govt. guidelines.

6. GENERAL RULES AND DIRECTIONS FOR THE GUIDANCE OF CONTRACTORS:

- 6.1 Deleted
- 6.2 In the event of tender being submitted by a partnership firm. It must be signed by each partner thereof, or in event of the absence of any partner it shall be signed on his behalf by person holding a power of attorney authorizing him to do so. Details of partners should be furnished in Annexure-I along with the copy of partnership.
- 6.3 Receipts for payment made on account of any work, when executed by a firm, shall also be signed by all the partners except where the Contractors are described in their tender as a firm in which case the receipts shall be signed in the name of the firm by one of the partners or by some other person having authority to give effectual receipts for the firm.
- 6.4 Any person who submits a tender shall fill up the usual printed form including the column total according to estimated quantities stating at what rate he is willing to undertake each item of the work. Tender which proposes any alteration in the works specified in the said form of invitation to tender or in the time allowed for carrying out the work or which contain any other condition of any sort, will be liable to rejection. No single tender shall include more than one work but contractors who wish to tender for two or more works shall submit a separate tender for each, Tender shall have the name and the number of the work (to which they refer) written outside the envelope.
- 6.5 The officer competent to dispose off the tenders shall have the right of rejecting all or any of the tenders.
- 6.6 No receipt for any payment alleged to have been made by a Contractor in regard to any matter relating to this tender or the contract shall be valid and binding on CWDB unless it is signed by the competent authority.
- 6.7 Under no circumstances shall any Contractor be entitled to claim enhanced rate for any items in this contract.
- 6.8 All corrections and additions or pasted slips should be initialed.
- 6.9 The measurements of work will be taken according to the usual method in use in the Public Works Department and no proposals to adopt

alternative methods will be accepted. The Insurance Company's bond will not be accepted against the security deposit.

- 6.10 In the event of any error or discrepancy in write up to tender documents the contractor will not take any undue advantage such error or discrepancy and competent authority shall have power to interpret and decide correct meaning of construct erroneous writing.
- 6.11 No foreign exchange will be released by the CWDB for the purpose of plant and machinery required for the execution of the work contracted for.
- 6.12 The contractor shall permit competent authority or his representative to inspect the stock of the materials stored by him at any time whenever the competent authority or his representative so desire (s).
- 6.13 The buildings under the contract will not be occupied by the contractor for use of their labors, staff or for any other purpose.

7. TENDER FOR WORK:

- (1) Time allowed for completion of the work (R.C.)
from the date of written order to commence

**2 Months (including
1 month trial & run
period)**

(2) Other details –

- (i) Date on or before which the tender
must reach the office
- (ii) Mode of sending the tender
- (b) Tenders received after last date and time of
submission will be outright rejected.
- (iii) Mode of quoting rate in Schedule 'B'

Open Tendering System (as
mentioned in annexure II) As
per Annexure II Notice
Inviting Tender

- a) Time allowed for the completion of work from date of written order to commence: 3 months the various items are to be completed.
- b) Should this tender be accepted, I /We hereby agree to abide by to fulfill all the terms and provisions of the conditions of the contract annexed here to so far as applicable and in default thereof to forfeit and pay to CWDB in Office the sums of money mentioned in the said conditions.

8. TERMS & CONDITIONS OF CONTRACT:

Definitions

In this contract, the following terms shall be interpreted as indicated:

- I. "The Contract" means the agreement entered into between the Owner and the Contractor, as recorded in the contract form signed by the parties, including all the attachments and appendices there to and all documents incorporated by reference therein.
- II. "The Contract Value" means the amount payable to the Contractor under the contract for the full and proper performance of its contractual obligations.
- III. "Contract Data" means any information provided in the Tender document and agreed to by the Contractor.
- IV. "The Work" means all labor, materials, tools and plant, equipment including government taxes and transport, that may be required in preparation of and for and in the full and entire execution and completion of "the Work".
- V. "Services" means services ancillary to the execution of the work such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Contractor covered under the contract.
- VI. "GCC" means the General Conditions of Contract contained in this section.
- VII. "SCC" means the Special Conditions of Contract.
- VIII. "The Owner" means the organization getting the work done, and or its representative
- IX. "The Contractor" means the individual or the firm executing the work.

- X. "The Project Site" where applicable, means the place or places named in SCC.
- XI. "Day" means calendar day.
- XII. "SITC" means Supply, Installation, Testing & Commissioning

Interpretation and Application

These general conditions shall apply to the extent that provisions in other parts of the contract do not supersede them.

In interpreting these Conditions of Contract, singular also means plural, male also means female Or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Owner will provide instructions clarifying queries about the Conditions of Contract.

If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended completion date are for the whole of the Works.

Standards

The works executed by the Contractor should be carried out in most professional manner, both as regards material and otherwise, in every respect, in strict accordance with the Technical Specifications. All materials and workmanship shall so far as procurable be of the respective kinds described in the priced schedule of quantities and/ or specifications and in accordance with the Owner's instructions, and the Contractor shall upon the request of the Owner, furnish them with all invoices, accounts; receipts and other vouchers to prove that the material procured complies therewith. When no applicable standard exists, the work shall be carried out as per the directions of the Owner. The Contractor shall at his own cost arrange for and / or carry out any Test of materials which the Owner may require. In case of discrepancies in tender wording as regards the specifications of materials workmanship etc., written instructions will supersede the tender wording unless otherwise mentioned.

The Owner in their absolute discretion from time to time shall issue further drawings and/ or written instructions, details, directions and explanations which are hereafter collectively referred to as “the Owner’s instructions” in regard to:

- a) The variation or modification of the design quality or quantity of works or the addition or omission on any work.
- b) Any discrepancy in the drawings or between the schedule of quantities and / or drawings and /or specifications/ dimensions etc.
- c) The removal and / or re-execution of any works executed by the Contractor.
- d) The removal from the site of any materials brought thereon by the Contractor and the substitution of any other materials therefore / or rejection of the material brought on site.

Use of Contract Documents and Information

The Contractor shall not, without the Owners’ prior written consent, disclose the contract or any provision thereof, or any specifications, plan, drawing, pattern, sample or information furnished by or on behalf of the Owner in connection therewith, to any person other than a person employed by the Contractor in performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.

The Contractor shall not, without the Owner’s prior written consent make use of any document or information except for the purposes of performing the contract. All documents included but not limited to contract agreement shall remain the property of the Owner and shall be returned (in all copies) to the Owner on completion of the Contractor’s performance under the contract, if so required by the Owner.

Performance Guarantee

Within 15 days from the date of PO/WO of the contract, the Contractor shall furnish performance guarantee in the form of a bank guarantee to the Owner, of the amount specified in the Special Conditions of Contract / General instructions /Schedule of fiscal aspects. The proceeds of the

performance guarantee shall be payable to the Owner as compensation for any loss or dues resulting from the Contractor's failure to complete its obligations under the Contract.

The performance guarantee shall be in the form of bank guarantee from nationalized bank.

The performance guarantee shall be discharged by the Owner and returned to the Contractor on completion of the work and recording of the completion certificate.

5% of the contract / approved tender value in the form of bank guarantee valid for period till completion of work from nationalized bank as per CWDB approved format.

Program and Reporting

The contractor shall furnish to the Owner a bar chart laying down weekly targets to complete the project within stipulated time for approval within fifteen days from the date of receipt of notification of PO/WO. Weekly progress report shall be furnished to the Owner confirming the progress.

The contractor must submit every week the following information to the Owner in writing:

- I. Number of men employed; trade wise.
- II. Progress achieved.
- III. Expected dates for completion of work.
- IV. Any actual or potential delay in program caused by the action or inaction of Owner and other contractors working on site.

Assignment and Sub-contracting

The whole of the works included in the Contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein without the written consent of the Owner.

No sub-contracting shall relieve the Contractor from the full and entire responsibility of the

Contract or from the active superintendence of the work during their progress.

The contractor has to engage specialized agencies / personnel depending upon the nature and complexity of the work with the prior approval of the Owner. To this regard, the contractor has to submit the completion certificates / required documents of similar type of works executed by the subcontractor / specialized agencies to establish the sub-contractor's / specialized agencies' workmanship. Also the contractor has to submit drawings done by the specialized agency for Approval of Owner before procuring and installing the item. This does not in any way relieve the contractor of his obligations to get the quality work and architectural design as desired by the Owner.

Contractor to provide everything necessary for proper execution of work

The Contractor shall provide everything necessary for the proper execution of the works according to the intent and meaning of the drawings, priced schedule of quantities and specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from. If the Contractor finds any discrepancy therein he shall immediately and in writing refer the same to the Owner whose decision shall be final and binding. Further, if any sample(s) of material(s), fittings, fixtures or finished item(s), to be used in the works, has/have been called for from the contractor, no work related to it/these shall be executed unless the same has/ have been approved by the Owner failing which no payment shall be made to the contractor on this account. Any sample, duly approved by the Owner shall become part of the supply to be used in "the works".

The Contractor shall supply fix and maintain at his cost, during the execution of any works, all the necessary power supply, water supply, scaffolding, watching and lighting by night as well as by day, required not only for the proper execution but also for protection of the public and the safety of any adjacent roads, streets, pavements, walls houses, building and other erections, matters or things.

Throughout the execution of the work, the Contractor or his representative duly authorized and fully responsible and technically conversant with the work under this agreement, acting on his behalf shall be available at the site for supervising the work. The Contractor shall make adequate arrangements for watchmen to guard the materials brought by them to the site and shall ensure the safety, breakage and any theft of materials fixed or unfixed by him. Any material, T & P brought to the site for bona fide use of the Project shall not be removed/ shifted from the site without the prior written permission of the owner.

Whenever required by the Owner the Contractor shall provide drawings / details before execution of work and get them approved by the Owner.

Wherever the specifications of any item indicate the usage of approved equivalent of any material, the Contractor shall get the sample of the equivalent material approved from the Owner before execution. The approval of the equivalent material is entirely at the discretion of the owner.

Establishment:

The contractor shall provide all stores, workmen and materials. All materials likely to deteriorate in the open shall be stored under suitable cover.

The contractor shall not be allowed to construct huts for accommodation of his employee or workmen, within the site area. The contractors employees or workmen will not be allowed to stay overnight at the site area.

The security of the contractor's equipment and materials is his own responsibility. The Owner accepts no liability for loss or damage to the contractor's plant, tools and tackles & materials.

The materials issued to the contractor by the Owner will remain under the custody of contractor as a trustee. However, title on the same will remain with the Owner. The contractor will be responsible for loss or damage to such materials and shall preserve them in good working conditions as required for the contract and good execution practices till such time that they are incorporated in the works and erected, aligned and fully installed in position and handed over to the Owner. In case the Owner feels that arrangements

made by the contractor are not adequate he shall so advise the contractor and the contractor shall promptly take corrective action. In case the contractor fails to take corrective action, Owner shall take such corrective actions and recover the cost thereof from the contractor's bills. Accounts of such material on completion of work shall be rendered and surplus material returned to the Owner as per instructions of Owner.

The contractor shall clear away periodically or as instructed by Owner any rubbish, scrap materials, etc. and dump the same in the authorized dump sites notified by local authority or area indicated by the Owner. All construction materials shall be neatly stacked in an orderly manner as directed by the Owner and care shall be taken to allow proper access to workmen and easy movement of men, vehicles, cranes and materials.

The contractor shall not permit the entry to the site of any person not directly connected/concerned with the work without first having obtained the written permission of Owner.

The contractor shall submit a list of equipment, tools, tackles, etc. which he will use, to perform the work. These tools, etc. shall not be removed from the site till the completion of job. A gate pass must be obtained from the Owner's representative in order to remove from site any testing equipment, tools and materials.

All items such as instructions and other pertinent data regarding erection/commissioning and maintenance should be typed and classified for transmittal in a manner approved by the Owner.

All employees of the contractor shall conform to rules of conduct, etc. established; failure to do so will be sufficient cause for removal of such person from the site.

For storage of materials, contractor has to provide at his own cost sufficient fenced and covered appropriate area on site for storage of above materials with lock and key arrangement. For arranging meetings suitable sized table and chairs shall be provided by Contractor.

Contractor to provide required quantity of potable water for his workers and staff.

Messing & Accommodation

The contractor will make his own arrangements for messing and accommodation and the same shall not be done at site. No accommodation and messing shall be provided by the Owner.

Procurement, Consumption and Storage of Materials

The contractor shall at his own expenses, provide all materials required for the works. Adequate stocks of all materials required for the work are to be maintained at site. No material (unless as provided elsewhere in this document) shall be supplied by the Owner.

All materials to be provided by the contractor shall be in conformity with the detailed specifications laid down in the contract and the contractor shall, if requested by the Owner furnish prior to the satisfaction of the Owner that the materials conform to the laid down specifications.

All materials required for execution of work must be got approved by the Owner before they are actually put to use.

The contractor shall, at his own expenses and without delay, supply to the Owner samples of materials proposed to be used in the work. The Owner shall within seven days of supply of samples, or within such further period as Owner may require intimate the contractor in writing, whether samples are approved by Owner, or not. If samples are not approved, the contractor shall forth with arrange to supply, for their approval, fresh samples complying with the specification laid down in the contract.

The Owner shall have full power to require removal of any or all the materials brought to site by the contractor which are not in accordance with the contract specifications or do not conform in character or quality to the samples approved by Owner. In case of default on the part of the contractor in removing rejected materials, the Owner shall be at liberty to have them removed by other means. The Owner shall have full powers to direct proper materials to be substituted for rejected materials and in the event of the

contractor refusing to comply. Owner may cause the same to be supplied by other means. All risks and costs which may attend upon such removal and/or substitution shall be borne by the contractor.

Contractor shall be responsible for procurement of all materials/ equipment etc. No delay due to non-availability of any material equipment will be entertained by Owner.

Method of storing the materials

The contractor shall at his own cost, provide for all necessary storage on the site in specified areas for all materials which are likely to deteriorate by the action of sun, wind, rain, dampness or other natural causes due to exposure in the compounds or in stores in such a manner that all materials, tools and tackles etc. shall be duly protected from damage by weather or any other cause.

Materials required for the works, by the contractor be stored by the contractor only at places approved by the Owner. Storage and safe custody of materials shall be the responsibility of the contractor.

All the materials including contractor's tools & tackles, testing & erection equipment brought by the contractor to the site shall become and remain the property of the Owner and shall not be removed off the site without prior written approval of the Owner. But whenever the works are finally completed and advances, if any, in respect of such items are fully recovered, the contractor shall at his own expenses forthwith remove from the site all surplus items supplied by him and upon such removal, the same shall revert in and become the property of the contractor.

Scaffolding Materials

It shall be desirable to have adequate amount of scaffolding materials to complete the work speedily and Owner's decision as to the quantum of these desirable resources at site shall be final and binding.

Completion of Work

Before finally leaving site, all the Contractors stores, tools & tackles, equipment and rubbish / Debris / waste materials shall be removed and the

site left clean and tidy. The space allocated by Owner shall be vacated and handed over to the Owner.

Employment of Labor

The contractor shall comply with the requirement of statutory provisions and shall be solely responsible for fulfilment of all legal obligations under Contract Labor (reg. & abolition) Act, Inter State Migrant Workmen Registration of Employment and condition of Service Act, payment of Wages Act., Minimum Wages Act, Workmen's Compensation act, Employee's Provident Fund & Miscellaneous Provisions Act, Payment of Bonus Act, Payment of Gratuity Act, Industrial Disputes Act and all other Industrial/Labor enactments and Rules made there under as applicable from time to time. In case Owner incurs any liability towards payment of any dues, compensation, cost of any other liability of any kind whatsoever, due to non- fulfilment of statutory provisions under any industrial/labor laws by the contractor, the same shall be made good by the contractor and Owner shall have full right to recover and claim the same against the contractor from his outstanding bills or otherwise. No Labor to stay at site.

The contractor will be expected to employ on the work only his regular skilled employees with experience of this particular work. Permission of the Owner must be obtained before tradesmen are recruited locally for the work. This rule does not apply to unskilled labor. No female labor shall be employed in dark hours/ i.e. hours prohibited under the applicable law. No person below the age of eighteen years shall be employed at any point of time. The contractor shall pay, to each person, the wages as per minimum Wages Act of the State Government.

All traveling expenses including provision of all necessary transport to and fro, lodging allowances and other payments to the contractor's employees are his own responsibility.

The hours of work at the site shall be decided by the Owner and contractor shall adhere to the same.

All contractors' employees shall wear safety shoes, helmet, goggles, hand gloves, nose masks and any other required personal protection equipment such identifications mark as may be provided by contractor on work site and duly approved by Owner.

All notices displayed on the site and any instructions issued by the Owner shall be strictly adhered to by the Contractor's and/or his sub-contractor's employees.

The contractor shall be required to maintain employment records as covered in relevant Acts and produce documentary evidence to the effect that he has discharged his obligations under the Employees Provident Fund Act 1952 and ESI Act, 1948, Group Insurance and other Acts for the workmen working at site towards safety, statutory regulations and insurance aspects applicable as per latest government (central & state) acts wherever applicable.

Working and Safety Regulations

The contractor shall observe all statutory, safety, and legal requirements / regulations issued by Central and State Governments applicable to the work as well as any local regulations applicable to the site.

The contractor has to fulfill the safety obligations at site and ensure that all safety equipment required for the execution of the work is available and used by the workmen at site.

Required safety signage and other requirement as per safety norms must be compiled as per the instructions of the Owner.

A qualified person in charge of safety should be posted at the site by the contractor to take care of the safety related issues during the execution period with regard to workmen and material.

Failure to employ the safety person will invite suitable deductions from the bills.

The contractor shall be responsible for the provision of all safety notices safety equipment including the safety gadgets for his workmen required by both the relevant legislation and such as the Owner may deem necessary. While working at heights, safety belts, nets, and safety helmets shall necessarily be used.

Particular attention is drawn to the following:

In case of accident, the Owner shall be informed in writing forth with and First-Aid, Hospitalization shall be provided by the Contractor. The contractor shall strictly follow regulations laid down by Govt. and State authorities in this regard and all cases are to be defended By the Contractor. The Owner shall not entertain any insurance claims.

Contractor shall fence his site area, excavations and etc.

Compliance with all electricity regulations should be ensured.

Compliance with statutory requirements for inspection and test of all lifting appliances and auxiliary lifting gear is to be ensured.

Staircase, doors or gangways shall not be obstructed in any way that will interfere with means of access of escape.

Contractor's Risks

All risks of loss or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.

The Contractor shall be responsible for injury to persons if any, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any sub-contractor or of any of his or sub- Contractor's employees whether such injury or damage arises from carelessness accident or any other causes whatsoever in any way connected with the carrying out of the Contract. This clause shall be held to include inter alia any damage to buildings, whether immediately adjacent or otherwise and any damage to roads, footpaths, or ways as well as all damage caused to the buildings and the work forming the subject to this Contract by frost, rain or other inclemency of the weather. The Contractor shall indemnify the Owner and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of Government or otherwise and also in respect of an award of compensation or damages consequent upon such claim. The contractor shall make good all damages of every sort mentioned in the Clause, as to deliver up the whole of the Contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

Insurance

The Contractor shall provide, in the joint names of the Owner and the Contractor, Insurance cover from the Start Date to the completion of work and handing over to the owner for the amounts and deductibles stated in the Contracted Amount for the following events which are due to the Contractor's risks and shall be covered under respective policies as under:

Contractor's All Risk Policy.

Third Party Insurance for four consecutive occurrences, the minimum cover for occurrence. The contractor shall provide workmen compensation policy, obtained in his name.

Policies and certificates for insurance shall be delivered by the Contractor to the Owner for the Owner's approvals before the Date of Start of work i.e., date of execution of the contract. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

If the Contractor does not provide any of the policies and certificates required, the Owner may affect the insurance which the Contractor should have provided and recover the premiums the Owner has paid, from the contractor bills. Otherwise, due to the Contractor or if no payment is

Due, the payment of the premiums shall be a debt due. The cost of premium will be deducted from the contractor's bill, if at any time the work remains uninsured.

Alterations to the terms of the insurance shall not be made without the approval of the Owner.

Both parties shall comply with the conditions in the insurance policy.

All policies in original shall be submitted to the owner before the release of the 1st bill.

Contractor to remove all scrap / unwanted material etc. immediately

All debris, packing materials or other matter shall be at once carted away by the contractor out of the premises/ site intimating the concerned authorities. Any material brought on site if found unsuitable / surplus shall be removed from site at once by the Contractor intimating the concerned authorities.

Inspections by Owner

The representative of the Owner at all times have free access to the works and /or to the workshops, factories or other places where materials are being prepared or executed for the Contract and also to any place where materials are lying or from which they are being obtained. No person except the representatives of Public authorities shall be allowed on the work at any time without the written permission of the owner. If any work is to be done at a place other than the site of the works, the Contractor shall obtain written permission of the owner for doing so.

The owner and their representatives shall have the right to test and/ or inspect the works to confirm their conformity to the contract, at all times, whenever in progress either on the site on the Contractor's premises wherever situated or any firm or company where work in connection with this contract may be in hand. All records, registers or documents relating to the works including materials used on works shall be kept open to the inspection of the Owner or his Authorized representative.

The Contractor shall get the quality of work done inspected for material and workmanship at different stages of execution as per instructions given by the owner or their representative from time to time. Any item of work done which is found not conforming to the Contract shall be rejected by the owner. The decision of the owner in such cases shall be final.

The inspections and tests may be conducted on the premises of the Contractor or at the Project site. When carried out on the premises of the Contractor or its sub- Contractor(s), all reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspectors at no charge to the Owner.

Should any inspected items of work fail to conform to the specifications, the Owner shall communicate them and the Contractor shall either replace them or make all alterations necessary to meet specification requirements free of cost to the Owner.

The Contractor shall offer the Engineer or any representative of Owner every facility and assistance for examining the works and materials. The Engineer

or any representative of the Owner shall have power to give notice to the Contractor or to his staff, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of The owner, Such examinations shall not in any way exonerate the contractor from the obligations to remedy any defects which may be found to exist at any stage of the work or after the same is completed.

Claims for Extra or for Deviations

The Owner shall not be responsible for the payment of any claim for extra work not included in the contract nor the Contractor shall be entitled to claim any addition to the contract sum in respect of any changes or alterations in the materials used unless the same shall have been ordered or sanctioned, as the case may be, in writing by the Owner.

Removal of Imperfect Work

If, it shall appear that the work has been executed with unsound, imperfect or unskilled workmanship, or with material of any imperfect or any inferior quality or otherwise not in accordance with the contract document, the Contractor shall at his own cost rectify, reform, remove, or reconstruct the same, either in the whole or in part, as may be directed by the Owner, whether or not the value of any such work or materials shall have been included in any payment made to the Contractor.

The Contractor shall remove all debris etc., clean the floors and hand over the site quite clean on completion of the work to the satisfaction of the Owner.

Delay in the Contractor's performance

Execution of the work and performance of the services shall be done by the Contractor in accordance with the time schedule specified by the Owner in the Notice for Invitation of Tenders.

If, at any time during performance of the contract, the Contractor should encounter conditions impeding timely execution of the works and performance of services, the Contractor shall promptly notify owner/ the Consultants in writing of the fact of the delay, its likely duration and its cause(s). As soon as possible, after receipt of the Contractor's notice, the

owner/Consultants shall evaluate the situation and may, entirely at its discretion, extend the Contractor's time for performance with or without liquidated damages.

Liquidated Damages

If the Contractor fails to execute any or all of the works or to perform the services within the period(s) specified in the contract, the Owner shall deduct from the contract value, as liquidated damages, a sum specified in the SCC for each week or part thereof delay until actual completion or performance, up to a maximum deduction of the percentage specified in SCC. Once the maximum is reached, the Owner may consider termination of the contract. The pro-rata progress envisaged and expected from the contractor shall be maintained, time being the essence of the contract.

Force Majeure

The Contractor shall not be liable for forfeiture of its performance security, liquidated damages or termination by default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.

For purposes of this clause, "Force Majeure" means an unforeseeable event beyond the control of the Contractor and is not because of the Contractor's fault or negligence. Such events may include acts of the Owner either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics.

If a Force Majeure situation arises, the Contractor shall promptly notify the Owner in writing of such conditions and the cause thereof. Unless otherwise directed by the Owner in writing, the Contractor shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

Termination by Default

The Owner may without prejudice to any other right or remedy by a written notice (of fifteen days) of default sent to the Contractor, terminate the contract in whole or part:

- A. If the Contractor fails to complete any or all of the works within the period(s) specified in the NIT or any amendment thereof, or within any extension thereof granted by the Owner, or
- B. If the Contractor fails to perform any other obligation(s) under the contract, In the event, the Owner terminates the contract in whole or in part, the Owner may procure, upon such items and in such manner as it deems appropriate, works or services similar to those unexecuted and the Contractor shall be liable to the Owner for any excess costs for such similar work or services. However, the Contractor shall continue the performance of the contract to the extent not terminated.

Termination for Insolvency

The Owner may at any time terminate the contract by giving written fifteen days' notice to the Contractor, if the Contractor becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Contractor, provided such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Owner.

Termination for Convenience

The Owner, by written notice of fifteen days sent to the Contractor, may terminate the contract, in whole or in part, at any time for its convenience. The notice shall specify that the termination is for Owner's convenience, the extent to which performance of the Contractor under the contract is terminated, and the date upon which such termination becomes effective. The items of work those are complete and ready after the Contractor's receipt of notice of termination shall be accepted, if completed within the notice period, by the Owner at the contract terms and values. For the remaining works, the Owner may elect.

- a) To have any portion completed at the contract terms and value and/or
- b) To cancel the remainder and pay to the Contractor an amount, finalized by the Owner, for partially completed works and for materials and parts previously procured by the Contractor.

- c) The contractor shall obtain written permission from the owner to complete the incomplete items of work during the notice period.

Resolution of Disputes

The Owner and the Contractor shall make every effort to resolve amicably by direct informal negotiations any disagreement or dispute arising between them under or in connection with the contract. If, after thirty (30) days from the commencement of such informal negotiations, the Owner and the Contractor have been unable to resolve amicably a contract dispute, either party may require that the dispute be referred for resolutions to the formal mechanisms specified in the SCC. These mechanisms may include but are not limited to, Arbitration in accordance with rules of Arbitration Act and award made in pursuance thereof shall be binding on both the parties.

Governing law

The contract shall be governed by the laws of The Union of India for the time being in force. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen in Jodhpur and only the courts in Jodhpur alone shall have exclusive jurisdiction to determine the same.

Notices

Any notice given by one party to the other pursuant to this contract shall be sent to other party in writing to the other party's address specified in SCC. A notice shall be effective on the date on which it is delivered, or on the notice's effective date, whichever is later.

Dismissal of workmen

The contractor on request from the Owner, immediately dismiss from the works any person employed by him who may be found in the opinion of the Owner to be unsuitable or incompetent or who has shown misconduct.

Working Hours

Normal working hours shall be from 9.00 a.m. to 6.00 p.m. Any works of important nature should not be carried out on Sundays, Holidays and during nights. However, permission to work beyond normal working hours can

be granted by the Owner in exceptional circumstances to achieve the target schedule of completion.

Delay and Extension of time

If in the opinion of the Owner the work be delayed:

- a) by force majeure or
- b) by reason of any exceptionally inclement weather or
- c) by reasons of owner's instruction or
- d) in consequence of the contractor not having received in due time necessary instructions from the Owner for which he shall have specially applied in writing or
- e) from other cause which the Owner may certify as beyond the control of the contractor the contractor shall request for approval by the Owner a fair and reasonable extension of time for completion of the Contract works. In case of strike or lockout the contractor shall as soon as may be given written notice thereof to the Owner, but the contractor shall nevertheless constantly use his endeavors to prevent delay and shall do all that may reasonably be required to the satisfaction of Owner to proceed with the work.

Examining the Works

The Contractor shall offer the Engineer or any representative of Owner every facility and assistance for examining the works and materials. The Engineer or any representative of the owner shall have power to give notice to the Contractor or to his staff, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the owner. Such examinations shall not in any way exonerate the contractor from the obligations to remedy any defects which may be found to exist at any stage of the work or after the same is completed.

Site Order Book

The contractor shall maintain a site order book at site for the purpose of quick communication between the contractor and owner. Any communication relating to the work may be conveyed through site order

book. Such a communication from one party to other shall be deemed to have been adequately served in terms of contract. Each site order book shall have machine numbered pages in triplicate, and shall be carefully maintained and preserved by the contractor, and shall be made available to the owner as and when demanded. Any instructions which the Owner may like to issue to the contractor or the contractor may like to bring to the owner two copies of such instructions shall be taken from the site order book and will be handed over to the Owner and the third copy will be retained with contractor.

Infrastructure

For storage of materials, contractor has to provide at his own cost sufficient fenced and covered appropriate area on site for storage of above materials with lock and key arrangement.

Contractor to provide required quantity of portable water for his workers and staff.

Governing language

The contract shall be written in English language. All correspondence and other documents pertaining to the contract that are exchanged by the parties shall be written in the same language.

Identifying Defects

The Owner shall check the Contractor's work and notify the Contractor of any defects that are found. Such checking shall not affect the Contractor's responsibilities. The Owner may instruct the Contractor to search for a defect and to uncover and test any work that the Owner consider may have a defect.

Correction of Defects

The Owner shall give notice to the Contractor of any defects before the end of defects liability period, which begins at Completion and is defined in the Contract Data. The defects liability period shall be extended for as long as defects remain to be corrected.

Every time notice of defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Owner's notice.

Uncorrected Defects

If the Contractor has not corrected a defect within the time specified in the Owner's notice, the Owner will assess the cost of having the defect corrected, and the owner will realize the cost of rectification from the contractor's bill.

Maintenance of Registers:

The contractor shall maintain the following registers at site of work and should produce the same for inspection by owner whenever desired by them. The contractor shall also maintain the records/registers as required by the local authorities.

- i. Registers for the electrical items as per the BOQ item category wise.
- ii. Registers for test, warranty and guarantee certificates.
- iii. Registers for onsite testing report details.
- iv. Site order book (triplicate).
- v. Daily progress report.
- vi. Register for the tools and tackles.

Schedule of Quantities:

The Schedule of Quantities shall contain items for the 250 kwp roof top solar grid connected and associated works specified in the tender i.e., installation, testing, and commissioning work to be done by the Contractor.

The Schedule of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the priced Schedule of Quantities.

No escalation shall be payable on any account.

Completion Certificate

The Contractor shall request the Owner to issue a Certificate of Completion of the Works and the Owner will do so upon deciding that the Work is completed.

Taking Over

The Owner shall take over the Site and the Works after Completion, subject to satisfaction of owner in regard to completion of work. Before handing over

the site, the contractor must obtain a site clearance certificate from the Owner.

No Claim Certificate

No claim certificate shall be submitted by the Contractor as per CWDB format along with the final bill (if the final bill is correct and complete).

Taxes

Taxes to be deducted at source and charges will be issued to the contractor. The contractor will be required to deliver the cheque to the concerned authorities, and the acknowledgement is to be deposited with CWDB.

SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract are supplementary, to the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract.

Definition

- A. Owner means **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity.**
- B. Site means the project site situated at Central Wool Development Board, Jodhpur

Performance Guarantee for Execution of Contract

Within fifteen days (15) from date of PO / WO, the Contractor shall furnish Performance Guarantee to the Owner amounting to 5% (Or Fixed Amount) of the accepted Tender Value in the form of Bank guarantee from nationalized bank. The (Earnest Money Deposit) EMD shall be returned on submission of the Performance Guarantee.

Release of FDR & Performance Guarantee for execution of contract :

100% after the completion of work and issuance of completion certificate by the Owner.

An Agreement will be executed after submission of Performance Guarantee as per CWDB format.

Payments

Following terms of payment shall be applicable

Security Deposit (SD)

- a) 2.5% of the bill value shall be deducted from every bill. Half of SD will be released with the final bill on submission of bank guarantees for equivalent amount with validity Period up to defect liability period plus 3 months. (i.e. 12 months from the project completion date).
- b) The balance half will be refunded / returned to the contractor after successful completion of the defect liability period.
- c) No Interest is payable on the Security Deposit.

Payment Terms –

1. Supply of Materials:

50% accepted BOQ item rate of purchase order after satisfactory acceptance by CWDB and Owner of the supplied materials along with the relevant following documents mentioned:

Deduction:-

- a) Statutory deductions of tax if any shall be deducted.
- b) Adjustment of any excess / short payment made in the earlier bills, at the time of making payments.
- c) Electricity and Water charges will be recovered as per tender terms.
- d) Value of chargeable materials if any issued by the Owner.
- e) Any other recovery if due as per tender terms & conditions.
- f) 2.5% of the bill value as Security Deposit.

Important Documents:-

- a) Computerized detailed measurements, Running Accounts Bills and Final Bill will be Prepared by contractor and submitted to CWDB for verification and approval.

- b) Document for claiming any subsidy from Government should be submitted to **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity.** for release of first RA bill.
- c) gate pass.
- d) Relevant test, type test, joint inspection reports warranty and guarantee Certificate for the items supply as per quality criteria mentioned tender document.
- e) Copy of Performance guarantee for contract execution from nationalized bank valid till completion of work for 5% of purchase order value.
- f) Insurance - Contractor's All Risk (CAR) Policy.
- g) GST registration number.
- h) Relevant test, type test, joint inspection reports warranty and guarantee Certificate for the items supply as per quality criteria mentioned tender document.
- i) Proof of deployment of project engineers as specified in SCC.
- j) Challans / receipts of taxes paid to statutory authorities.
- k) Computerized detailed measurements, Running Accounts Bills and Final Bill will be Prepared by contractor and submitted to Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity for verification and approval.
- l) Bank guarantee of PO value valid up to defect liability period.
- m) Submission Total Integrated System Warranty Certificate valid for 15 years.
- n) Torrent clearance letter.
- o) Job completion certificate by **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity.**
- p) No claim certificate on Owner's prescribed pro forma - if any deduction is to be made for short fall, owner shall record the same in this document.
- q) Site clearance certificate by **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity.**
- r) A compliance Certificate should be submitted towards deployment of Technical & Safety man power as per the relevant Tender Clauses.
- s) Relevant test, type test, joint inspection reports warranty and guarantee Certificate for the items installed, integrated & commissioned as per

quality criteria mentioned tender document.

- t) **Concerned Agencies in which Solar to be installed of respective Capacity** gate pass.
- u) Valid Indemnity Bond in standard pro forma indemnifies the Owner against all risks arising during the performance of the contract.
- v) Final acceptance certificate issued by **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity/ Owner**
- 2. **Payment of Bills for installation, erection, testing, integration, successful commissioning of integrated system in total and ready for handing over to** Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity.

30% of the Bill amount for the materials quoted will be paid after joint inspection / measurements by the Owner for installation, erection, testing, integration, successful commissioning of integrated system in total and ready for handing over to CWDB by the contractor

- 3. **Payment of Bill - Performance testing of total integrated system - final Payment / bill:**

Balance 20% of the materials bill shall be paid after performance testing of total integrated system for two months in all respect.

The final bill complete in all respect shall be submitted by the contractor within 60 days from the completion of the work.

Performance Penalty:

- a) Integrated project performance of minimum solar energy generated 1400 units annually per 1KWp with degradation of 1% for any reason, from second year onwards. If generated units fall short, then Rs.6.80 per unit of short fall will be deducted from CWDB payments every year up to 15th year (i.e. first instalment starts from 24th month from the date of project completion / acceptance).
- b) CWDB reserves the right to adjust any excess / short payment made in the earlier bills, at the time of making payments.

Defects Liability Period:

12 calendar months from the date of Issue of Final completion certificate/Acceptance of work by CWDB.

Increase in cost:

Quoted prices are firm and no escalation charges on any account are allowed in this work. No claim will be entertained on this account in future.

Disallowance of payment:

If payment has been made for any item but later on some defect is noticed, Owner is authorized to disallow payment of the subsequent bill till rectification / replacement of the item.

Escalation

No Escalation shall be paid on any account if applicable shall be paid as per govt. norms

Liquidated Damages

0.5% per week of delay up to a maximum of 10% (ten percent) of the Contract value from the stipulated date of completion.

Notices

For the purpose of all notices, the following shall be the address of the Owner and the Contractor.

Owner:

Executive Director,

CWDB Jodhpur

Agency: _____

(To be filled in at the time of Signing of the Contract)

Labor

The Contractor shall make his own arrangements for the engagement of all staff and labor, local or other, and for their payment, housing, food, transport etc. No labor to stay at site.

The Contractor shall, if required by the owner deliver to the owner a return in detail, in such form and at such intervals as the owner may prescribe, showing the staff and the numbers of the several classes of labor from time to

time employed by the Contractor on the Site and such other information as the owner may require.

Compliance with labor regulation: During continuance of the contract, the Contractor and his sub-Contractors shall abide at all times by all existing labor enactments and rules made there under, regulations, notifications and bye-laws of the State or Central Government or local authority and any other labor law (including rules), regulation by laws that may be passed or notifications that may be issued under any labor law in future either by the State or the Central Government or the local Authority. The Contractor shall keep the Owner indemnified in case any action is taken against the Owner by the competent authority on account of contravention of any of the provisions of any Acts or rules made there under, regulation or notifications including amendments. If the Owner is caused to pay or reimburse, such amount as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules /regulations including amendments, if any, on the part of the Contractor, the owner shall have the right to deduct from any money due to the Contractor including his amount of performance security. The Owner shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Owner

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Owner at any point of time.

No labor shall stay at site. Temporary storage space provision should be made by contractor. The rates shall be complete in all respects i.e. inclusive of all taxes, local taxes, work contract tax, Insurance charges nothing on any account shall be paid over the approved rate. All specialized and specific jobs shall be carried out by approved agencies/vendors only.

The Contractor shall arrange temporary drinking water and sanitation facilities for his workmen.

Fair Wage Clause

- I. The contractor shall pay not less than fair wages to laborers engaged by him on the work.

- II. "Fair" wages mean wages whether for time or piecework notified by the Government from time to time for the locality of work.
- III. The contractor shall notwithstanding the revisions of any contract to the contrary cause to be paid to the labor directly engaged on the work including any labor engaged by the sub-contractor in connection with the said work, as if the laborers had been directly employed by him.
- IV. In respect of labor directly or indirectly employed in the works for the purpose of the contractor's part of the agreement the contractor shall comply with the rules and regulations on the maintenance of suitable records prescribed for this purpose from time to time by the Government. He shall maintain his accounts and vouchers on the payment of wages to the laborers to the satisfaction of the Owner.
- V. The Owner shall have the right to call for such record as required to satisfy himself on the payment of fair wages to the laborers and shall have the right to deduct from the contract amount a suitable amount for making good the loss suffered if any by the worker or workers by reason of the "fair wages" clause to the workers.
- VI. The contractor shall be primarily liable for all payments to be made and for the observance of the regulations framed by the Govt., from time to time without prejudice to his right to claim indemnity from his sub-contractors.
- VII. As per contract labor (Regulation and abolition) Act.1970 the contractor has to produce the license obtained from the licensing officers of the labor department along with the tender viii. Any violation of the conditions above shall be deemed to be a breach of his contract.
- VIII. Equal wages are to be paid for both men and women if the nature of work is same and similar.
- IX. The contractor shall arrange for the recruitment of skilled and unskilled labor local and imported to the extent necessary to complete the work within the agreed period as directed by the Owner.

Safety Measures

- I. The contractor shall take necessary precautions for safety of the workers and preserving their health while working in such jobs, which require special protection and precautions. The following are some of the measures listed but they are not exhaustive and contractor shall add to and augment these precautions on his own initiative where necessary and shall comply with directions issued by the Owner or on his behalf from time to time and at all times.
- II. Providing protective foot wear, Goggles, nose masks, electrical hand Gloves, helmet to the workers as per the site requirement.
- III. Getting the workers in such jobs periodically examined for chest trouble due to too much breathing in to fine dust.
- IV. Taking such normal precautions like fencing and lighting in excavation of trenches,
 - V. working at heights, during night time etc. as per the site requirement.
- VI. Supply work men with proper belts, ropes etc., when working in precarious slopes and heights etc. as per the site requirement.
- VII. Avoiding un-insulated electrical wire etc., as they would electrocute the workers.
- VIII. Taking necessary steps towards training the workers concerned on the machinery before they are allowed to handle them independently and taking all necessary precautions in and around the areas where machines hoists cable pulleys, rollers, hydraulic tools etc. are working.
- IX. The Contractor should isolate the work spot by providing safety barricades, Signage boards etc.

Resolution of Disputes & Arbitration

All disputes, other than quality, quantity, workmanship, specification, design, drawing, extension of time and rates for extra items, arising out of or relating to this contract whether arising during the progress of the work or after cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned herein after. The decision of Owner on the above said excepted matters shall be final and binding.

If the contractor considers any work demanded of him to be outside the requirements of the contract or disputes any drawings, record or decision given in writing in connection with or arising out of the contract or carrying out of the work, he shall promptly within 15 days request the Owner in writing for written instruction or decision.

If the Contractor is dissatisfied with this decision, the Contractor shall within a period of 30 days from receipt of the decision, give written notice to Executive Director, CWDB for appointment of Arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the Arbitrator. Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by Executive Director, CWDB. If the arbitrator so appointed is unable or unwilling to act or resign his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each dispute along with the notice for appointment of arbitrator.

Protection of Environment

The Contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

During continuance of the contract, the Contractor and his subcontractors shall at all times abide by all existing enactment on environmental protection and rules made there under, regulations, notifications and bye-law of the State or Central Government, or local authorities and any other law, by-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

Salient features of some of the major laws that are applicable are given below:

The Water (Prevention and Control of Pollution) Act, 1974: This provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. 'Pollution' means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms. The Air (Prevention and Control of Pollution) Act, 1981: This provides for prevention, control and abatement of air pollution, 'Air Pollution' means the presence in the atmosphere of any air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment. The Environment (Prevention and Control of Pollution) Act, 1986: This provides for the protection and improvement of environment and for matters connected to herewith, and the prevention of hazards to human beings. Other living creatures, plants and property, 'Environment' includes water, air and land and the interrelationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro- organism and property. The Public Liability Insurance ACT 1991: This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act, 1986, and exceeding such quantity as may be specified by notification by the Central Government.

It is also a term of this contract that no person other than a person appointed by such CWDB as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of this contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 30 days of receiving the intimation from the Owner that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and CWDB shall be discharged and released of all liabilities under the contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause.

It is also a term of contract that a simple interest of not more than 6% shall be applicable on the award.

The fees of arbitration and cost of proceeding shall be shared equally by both the parties.

Quantity of Work

The quantities mentioned in the purchase order are only approximate in nature i.e. approximate quantified scope. Hence, the contractor can't claim any compensation towards non-operation of part or total quantities and non-operated items listed in the Purchase Order.

Progress Report

Monthly progress report along with photographs of work progress shall be submitted to the Owner before 10th day of every month.

Accident or Injury to Workmen

CWDB, Jodhpur shall not be responsible for any injury or loss of life of any worker of the contractor that may take place while on work. Any compensation or expenditure towards treatment for such loss of life or injury shall be the sole responsibility of the contractor.

The contractor is solely responsible for any damage injury or accident that may occur to any of his personnel working under this contract. He will not claim any compensation from CWDB.

Payments for Quantified Items

Since the payments are based on actual site measurement, the contractors are advised to procure the materials based on actual site requirement. Payment will not be made for left out and unused materials.

Taxes

During the currency of the contract, deduction of TDS as applicable from the gross value of each bill of the contract.

The contractor's staff, personnel and labor will be liable to pay personnel income taxes in respect of their salaries and wages as are chargeable under the laws and regulations for the time being in force, and the contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations.

Any tax (if applicable) as per rule will be borne by the contractor. Taxes to be deducted at source and cheques for any tax (if applicable) will be issued to the contractor. The contractor will be required to deliver the cheque to the tax authorities, the acknowledgement of which will be deposited by the contractor with CWDB along with subsequent bill.

The contractor shall submit to CWDB proof of payment of service tax to concerned tax authorities from time to time on demand.

Materials Entry

It would be necessary for the contractor to get his materials a gate entry authorization from security office at the Concerned Agency Main gate duly signed by the duty officer of Concerned Agency. These gate entry records must be submitted along with the bills.

Detailed Working Drawings

The Contractor has to prepare detailed working drawings and get them approved by **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity.**

Cost of all drawings and details to be furnished by the Contractor shall be deemed to be included in his tendered rates of work. Approval of Drawings etc. shall not be construed as authorizing additional work or increased cost to the company unless such additional works are authorized in writing by the **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity.**

After installation is completed, 3 sets of as built Drawings shall be prepared in full details along with soft copy in pen drive and submitted to **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity.**

Regulations & Standards

The installation shall conform in all respects to the Indian Standard Code of Practice for Electrical Installations. It shall also be in conformity with the current Indian Electricity Rules and Regulations and requirements of the local Electric Supply Authority in so far as these become applicable to the installation. Wherever the specifications of this tender document call for higher standard of material and/or workmanship than those required by any of the above codes and regulations then these specifications shall take precedence over the said regulations and standards.

Manufacturer's Instructions

Where manufacturers have furnished specific instructions relating to the materials used and procedural steps in this job, covering points not specifically mentioned in this document, those instructions shall be followed in all cases.

FORM OF PERFORMANCE GUARANTEE / BANK GUARANTEE BOND

In consideration of CWDB having offered to accept the terms and conditions of the proposed agreement between..... and (Here in after called “ the said contractor(s)” for the work (Here in after called “the said agreement”) having agreed to production of an irrevocable Bank guarantee for Rs..... (Rupeesonly) as a security / guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We (Here in after referred to as the “Bank”) hereby undertake to (Indicate the name of the Bank) pay to the CWDB an amount not exceeding Rs..... (Rupees..... Only); on demand by the Registrar.

2. We.....do hereby under take to pay the amounts due and payable (Indicate the name of the Bank) under this guarantee without any demur, merely on a demand from the Registrar stating that the claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees Only).

3. We, the said Bank, further undertake to pay CWDB any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under, and contractor(s) shall have no claim against us for making such payment.

4. We.....further agree that the guarantee herein contained shall (indicate the name of the Bank) remain in full force and effect during the period that would be taken for the performance of the said agreement, and it shall continue to be enforceable till all the dues of the Registrar under or by virtue of the said agreement have been fully paid, and it's claims satisfied or discharged, or till the Owner, on behalf of the Registrar, certifies that the terms and conditions of the said agreement have been fully and properly

carried out by the said contractor(s), and accordingly discharges this guarantee.

5. We.....further agree with the CWDB that the CWDB (Indicate the name of the Bank) shall have the fullest liberty without our consent, and without effecting in any manner our obligations hereunder, to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from the time to time any of the powers exercisable by the Registrar against the said contractor(s), and to forbear or enforce any of the terms and conditions related to the said agreement, and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor(s) or for any forbearances, act of omission on the part of the Registrar or any indulgence by the Registrar to the said contractor(s) or by any such matter or things whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).

7. We lastly undertake not to revoke this Guarantee except with (Indicate the name of the Bank) the previous consent of the Registrar in writing.

8. This guarantee shall be valid up to unless extended on demand by the CWDB notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.....(Rupees.....only), and unless a claim in writing is lodged with us within six months of the date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the..... day of..... For.....
(Indicate the name of the Bank)

Scope of the Work

The Scope of Work covered under this specification shall be but not limited to the followings: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING (SITC) OF 250,35,50 KWP GRID CONNECTED ROOFTOP SOLAR PV POWER PLANT AT VARIOUS LOCATIONS

1) **Design, Manufacturing & Testing**

Dismantling of the existing utilities as directed by **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity.** (no extra payment shall be reimbursed to agency)

Design, engineering, manufacture, testing at works and supply at sites of suitable Mono Crystalline Bifacial Silicon Solar Cell Module in the total capacity of 250 KWp, 35 KWP, 50 KWP rating complete with accessories as may be required for erection, commissioning and successful continuous operation of 250 KWp, 35 KWP, 50 KWP capacity SPV based Power Plants with the DISCOM's grid. The SPV based Power Plants shall be equipped with current limiting devices and capacitors so as to maintain power factor as required by the DISCOM's Grid.

Design & manufacture of Module mounting structure for SPV module(s) along with design of Module mounting structure foundation, erection, testing & commissioning of all the SPV module(s).

Design, manufacturing, testing at works, transportation, supply, erection, testing at sites and commissioning of SPV based Power Plants' Internal electrical system.

Grid interfacing, including transformer (if needed), panels, kiosks, protection equipment, metering equipment, LT lines for the evacuation point of the SPV based Power Plant.

Energy meter(s) for the export of power to the Local grid substation and recording import of the power from the grid will be installed by the supplier.

Design and construction of control room adequate for housing power and control panels, CMS etc (if required). VAR drawn compensation system (if required)

Laying of appropriate evacuation system (through proper conduits, cable tray as applicable best practices) for inter connection with the Local grid etc.

2) **Safety Equipment/ Charts, Misc. Items etc. provided at sites**

Rubber mats of appropriate size, electrical shock treatment chart, fire extinguisher, fire buckets, danger notice board/ stickers etc. confirming relevant IS shall be provided at sites.

Suitable arrangement of ladder of sufficient strength and made of MS material with hot- dip galvanized shall be provided at site(s).

It is contractor's responsibility to observe & implement safety rules & practices as per prevailing acts. **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity** will not be responsible for any kind of accident / damage done person(s) or property (ies) during the entire contract period. No compensation of any kind shall be given to contractor on breaching of any kind of safe working practice during the contract period.

3) **Statutory Approvals**

Obtaining statutory approvals/ clearances from Government departments but not limited to the following: -

- Energy Development Agency
- Any other concerned authority

4) **Manpower & Utilities**

Deployment of manpower, required consumables, testing equipment's during erection till commissioning, arrangement of power & water as required for this contract shall be arranged by the bidder.

5) **Documents**

- I. Submission of following documents drawings data design and engineering information to **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity** for review and approval in four copies.
- II. Detailed technical specification.
- III. Design criteria.
- IV. General arrangement

- V. Schematic diagram for entire evacuation system up to interfacing with LT/ HT distribution at site.
- VI. GA drawings for all types of structures, PCU & Interfacing, metering with LT/ HT distribution panels at site.
- VII. Quality assurance plans.
- VIII. Test report (for type, acceptance, and routine tests) for major items.
- IX. Two sets of all the drawings shall be fully corrected to agree with the actual "as built" site conditions and submitted to CWDB after commissioning of the project for record purpose. One digitized soft copy of as built drawings shall also be submitted.
- X. O & M Manuals of all the important equipment's (in 02 sets).
- XI. Handing over all relevant documents (original)

6. Training

Providing a detailed training to **Concerned Agencies technicians in which Solar to be installed of respective Capacity** for all operations, maintenance procedure.

Volume - II

Technical Specification

1. Definition

The Grid Connect Solar Power Generating System consists of mainly three components viz. the SPV (SPV) array, module mounting structure and the power conditioning unit (PCU)/ inverter. The SPV array converts the solar energy into DC electrical energy. The module mounting structure holds the modules in required position and the DC electrical energy is converted to AC power by the PCU, which is connected to the power grid. The AC power output of the inverter is fed to the AC distribution board through metering panel and isolation panel. The 415 V AC output-3Ø of the system can be utilized or it could be stepped up to the required voltage level and after synchronizing with the grid can be exported to the grid.

I	Location / Site Details for the SPV Power Project:-	At Various locations
Ii	Available Roof- space	As applicable
Iii	Ambient Temp.	Site specific
Iv	Lat. / Long.	Site specific
V	Elevation	Site specific
Vi	Tilt Angle	Suggested as per the Latitude, however best fit as per the roof orientation.
Vii	Feeding Point	At the nearest LT Panel (415 V) or at HT side (11 KV) in-case of LT grid interfacing is not possible due to any reason.
NOTE: BIDDERS MUST VISIT THE SITE BEFORE QUOTING THE RATES.		

2. PV MODULE (S)

The Photovoltaic modules must be tested & approved by one of the IEC authorized test centres, Test Certificates can be from any of the NABL / BIS accredited testing/ Calibration laboratories the module type must be qualified as per IEC 61215 (Second Edition). In-addition, PV modules must qualify to IEC 61730 Part I to II for safety qualification testing, IEC 61701- Salt Mist Corrosion Testing of Photovoltaic (PV) Modules, IEC 62716- Photovoltaic (PV) Modules – Ammonia (NH₃) Corrosion Testing, IEC 62804 (Technical Specifications)- Photovoltaic (PV) modules - Test methods for the detection of potential-induced degradation, and IEC 62759-1-Photovoltaic (PV) modules – Transportation testing, Part 1: Transportation and shipping of module package units. SPV module conversion efficiency should not be less than 15.0% under STC. The SPV Modules to be supplied should be tested from MNRE.

The PV module used in Grid Connected Solar Power system should have the latest addition of following BIS-PV Module qualification test or, equivalent IEC Standards:

The power output of the module (s) under STC should be as given in section scope of work. Modules of minimum 380-400 Watts output each or above output should be used. Photo/ electrical conversion efficiency of SPV module shall be greater than 15% under STC.

All materials used shall have a proven history of reliable and stable operation in external applications. It shall perform satisfactorily in relative humidity up to 100% with temperatures between 0° C and +85° C and with stand gust up to 200 km/h from back side of the panel. The terminal box on the module should have a provision for opening for replacing the cable, if required.

Aluminium extruded frame structures with adequate strength and in accordance with relevant BIS standards can also be used with proof that the design of the structure can withstand the wind speed of 170 km per hour as per BIS Standards.

A strip containing the following details should be laminated inside the module so as to be clearly visible from the front side.

Identification and Traceability

Each PV module used in any solar power project must contain the following Information:

- I. Name of the Supplier or distinctive Logo
- II. Model or Type No.
- III. Serial No.
- IV. Year of make.
 - a) Name of the manufacturer of PV Module
 - b) Name of the manufacturer of solar cells
 - c) Month and year of the manufacturer (separately for solar cells and modules.
 - d) I-V Curve for the module
 - e) Peak wattage, I_m , V_m and FF for the module vi. Unique Serial No and Model No of the Module
 - f) Date and year of obtaining IEC PV module qualification certificate.
 - g) Name of the test lab issuing IEC certificate.

The rated output power of any supplied module shall not vary more than 3- 5% from the average power rating of all modules.

The module frame is made of corrosion resistant materials, which is electrolytically compatible with the structural material used for mounting the module.

The module shall have warranty of 25 years with degradation of power Generated not exceeding 20% of the minimum rated power over the 25 years period and not more than 15% after 15 years period. The Bidder will have to furnish a CORPORATE GURANTEE on a required stamp paper for the same.

Protective devices against surges at the PV module shall be provided, if required. Low voltage drop bypass and / or blocking diode(s) may also be provided, if required.

Module Junction box (weather resistant) shall be designed for long life out door operation in harsh environment.

A minimum warranty of 25 (Twenty-five) years shall be given with degradation of power generated not exceeding 15% (Ten) over the entire period of 15 (Fifteen) years.

The solar modules shall have suitable encapsulation and sealing arrangements to protect the silicon cells from the environment. The arrangement and the material of encapsulation shall be compatible with the thermal expansion properties of the Silicon cells and the module framing arrangement/material. The encapsulation arrangement shall ensure complete moisture proofing for the entire life of the solar modules.

Each module shall have low iron tempered glass front for strength and superior light transmission. It shall also have tough multi layered polymer back sheet for environment protection against moisture and provide high voltage electrical insulation.

Data sheet of the offered module along with their IEC certificate and third- party test results must be submitted along with the offer giving details of peak power, peak current, short circuit current, fill factor, open circuit voltage, peak power voltage etc.

Orientation and Tilt of PV Module(s): -

Modules alignment and tilt angle shall be calculated to provide the maximum annual energy output. This shall be decided based on the location of array installation.

SLANTED ROOF MOUNTED FIXED TYPE PV PANEL STRUCTURES

The supplier shall specify installation details of the PV modules and the support structures with appropriate diagrams and drawings. Such details shall include, but not limited to the following:

- Array tilt angle to the horizontal, with permitted tolerance;
- Details with drawings for fixing the modules;
- Details with drawings of fixing the junction/terminal boxes;
- Interconnection details inside the junction/terminal boxes;
- Structure installation details and drawings;
- Electrical grounding (earthling);

- Inter-panel/Inter-row distances with allowed tolerances; and
- Safety precautions to be taken.

The array structure shall support SPV modules at a given orientation to absorb and transfer the mechanical loads to the roof of porta cabin properly. The portion of array structure if any lying within the column shall be of aluminum extruded section of superior quality. All nuts and bolts shall be of very good quality stainless steel. Detailed design and Drawing of the module mounting structures shall have to be submitted to CREST for acceptance before execution of work. Self-drilling fasteners with SS and rubber washers should be provided to fix SPV panels. Silicon sealant around the fasteners should also be provided. Strict care should be taken during execution to avoid any damage to the roof surface of the porta cabins and to ensure no leakage should occur.

- I. Structures shall be supplied complete with all members to be compatible for allowing easy installation at the rooftop site.
- II. The Structure shall be made out of Aluminum member as per design to be submitted by firm. The structures shall be designed to allow easy replacement of any module.
- III. Each structure should have angle of inclination as per the site conditions to take maximum insolation.
- IV. Each panel frame structure be so fabricated as to be fixed on the rooftop, column/wall structures. The structure should be capable of withstanding a wind load of 170 KM/hr after installation. The certificate about structure capable to withstand 170 KM/hr wind speed should be provided from Chartered Structural Engineer on his letter pad with his registration No.
- V. The structures shall be designed for simple mechanical and electrical installation. There shall be no requirement of welding or complex machinery at the installation site. If prior civil work or support platform is absolutely essential to install the structures, the supplier shall clearly and unambiguously communicate such requirements along with their specifications in the bid. Detailed engineering drawings and instructions for such prior civil work shall be carried out prior to the supply of Goods.

All self- drilling fasteners, nuts and bolts shall be of very good quality stainless steel.

- VI. No damage in any way should be caused to the porta cabins slanting rooftops, terrace while installation of SPV Power Plant. If any damage done it will wholly be the responsibility of the bidder and cost shall be recovered from the bidder.

3. Earthling and Surge protections:

The array structure of the PV modules shall be grounded properly using adequate numbers of earthling pits suggested by government authority. All metal casing/ shielding of the plant shall be thoroughly grounded to ensure safety of the power plant. All the power conditioning unit and electricity metering unit having any exposed metal part must be grounded.

Two separate earthling must be provided for safer & reliable operations.

The SPV power plant shall be provided with lightning & over voltage protection.

The source of over voltage can be lightning, atmosphere disturbance etc.

4. Mechanical Components:

Metallic frame structure of galvanized steel with stands to be fixed on the roof of the building to hold the SPV module (s) one foot above roof level. The inclination angle should be best suitable to get the maximum output. All hardware, nuts, bolts should be cadmium passivated/ plated.

5. Module Mounting Structure:

The array structure shall be made of hot dip galvanized MS angles of size not less than 40 mm x 60 mm x 2 mm size. The minimum thickness of galvanization shall be at least 70 (seventy) microns. All nuts & bolts shall be made of very good quality ISI grade stainless steel. The minimum clearance of the lowest part of the module

Structure and the developed ground level shall not be less than 500 mm or as per site situation(s).

Structure shall be nut bolting and HDGI material. Minimum weight of structure should 35 Kg/KW.

Leg assembly of module mounting structure made of different diameter galvanized tubes may be accepted. The work should be completed with supply, fitting fixing of clamps, saddles, nut & bolts etc. While quoting the rate, the bidder may mention the design & type of structure offered. All nuts & bolts shall be made of very good quality stainless steel.

The structure shall be designed to allow easy replacement of any module and shall be in line with site requirements. The structure shall be designed for simple mechanical and electrical installation. It shall support SPV modules at a given orientation, absorb and transfer the mechanical loads to the ground properly. There shall be no requirement of welding or complex machinery at site.

The array structure shall be so designed that it will occupy minimum space without sacrificing the output from SPV panels at the same time it will withstand wind speed up to maximum 170 km/h.

The supplier/ manufacturer shall specify installation details of the PV modules and the support structures with appropriate diagrams and drawings.

After taking in to consideration all aspects of the site, roof top strength etc., the bidder shall quote for civil works. The foundation design of module structure design shall be submitted to **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity** for approval. The work will have to be carried out as per designs approved by **Central Wool Development Board, Jodhpur and Concerned Agencies in which Solar to be installed of respective Capacity**

6. Junction Boxes

The junction boxes shall be dust, vermin and waterproof and made of FRP. The terminals shall be connected to copper bus bar arrangement of proper sizes. The junction boxes shall have suitable cable entry points fitted with cable glands of appropriate sizes for both incoming and outgoing cables. Suitable markings shall be provided on the bus bar for easy identification and cable ferrules shall be fitted at the cable termination points for identification. The

junction boxes shall have suitable arrangement for the following:

Combine groups of modules into independent charging sub-arrays that shall be wired to the PCU.

Provide a test point for each sub-group for quick fault location. To provide group array isolation. The rating of the JB's shall be suitable with adequate safety factor to inter connect the Solar PV array.

7. Dc Distribution Board (DCDB):

Solar array side breaker shall be housed in enclosure. These can also be housed within the PCU to save space.

8. Other Features:

The PV module (s) will be warranted for a minimum period of 25 years from the date of supply with maximum 10% degradation in 10 years. Solar PV power plant will be warranted for a period of ten years from the date of supply.

An Operation, Instruction and Maintenance Manual in English and Gujarati should be provided with the system.

The following minimum details must be provided in the Manual:

- a) About Photovoltaic
- b) About solar PV system– its components and expected performance.
- c) About PV module(s)
- d) Clear instructions about mounting of PV module(s)
- e) About electronics
- f) DO's and DON'T's
- g) Clear instructions on regular maintenance and trouble shooting of solar power plant.
- h) Name and address of the person or service center to be contacted in case of failure or complaint.

The details of the Power Conditioning Unit are as given below: Inverter of the suitable capacity per location has to be used.

The inverter must comply with the following standards: -

IEC 62109-1, IEC 62109-2: Safety of power converters for use in photovoltaic power systems - Part 1: General requirements, and Safety of power converters for use in photovoltaic power systems - Part 2: Particular requirements for inverters. Safety compliance (Protection degree IP 65 for outdoor mounting, IP 54 for indoor mounting)

IEC/IS 61683: Photovoltaic Systems – Power conditioners: Procedure for Measuring Efficiency (10%, 25%, 50%, 75% & 90-100% Loading Conditions)

BS EN 50530: Overall efficiency of grid-connected photovoltaic inverters: This European Standard provides a procedure for the measurement of the accuracy of the maximum power point tracking (MPPT) of inverters, which are used in grid- connected photovoltaic systems. In that case the inverter energizes a low voltage grid of stable AC voltage and constant frequency. Both the static and dynamic MPPT efficiency is considered.

IEC 62116 or, IEEE 1547: Utility-interconnected Photovoltaic Inverters - Test Procedure of Islanding Prevention Measures

In-addition, “IEC 61727:2004 Photovoltaic (PV) systems - Characteristics of the utility interface” is being added, along-with “Technical Standards for Connectivity of the Distributed Generation Resources” as published by Central Electricity Authority (CEA), Ministry of Power, Govt. of India.

IEC 60068-2 (1, 2, 14, 30 & 64): Environmental Testing of PV System – Power Conditioners and Inverters a) IEC 60068-2-1:

Environmental testing - Part 2-1: Tests - Test A: Cold

b) IEC 60068-2-2:

Environmental testing - Part 2-2: Tests - Test B: Dry heat

c) IEC 60068-2-14:

Environmental testing - Part 2-14: Tests - Test N: Change of temperature

d) IEC 60068-2-30:

Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 hcycle)

e) IEC 60068-2-64:

Environmental testing - Part 2-64: Tests - Test Fh: Vibration, broadband random and guidance

IEC 61000: Part 2 (Environment), Part 3 (Limits) & Part 6 (Generic standards): Electromagnetic Interference (EMI), and Electromagnetic Compatibility (EMC) testing of PV Inverters (as applicable)

9. The details of the Power Conditioning Unit (PCU) are as given Below: -

PCU Rating (NOMINAL)	415 V AC Grid- tie Interactive Output The power conditioner unit shall convert DC produced by SPV array and adjust the voltage & frequency levels to suit the Grid Purpose. The capacity of the PCU per location is as given in the section “scope of work”.
Grid Supervision	All three phases shall be supervised with respect to rise/ fall in programmable threshold values of frequency & the power sectionof the plant. The plant shall get disconnected/ connected from thegrid in case of a grid fault/ after normal grid conditions have resumed. The grid supervision must comply with VDEW (IEC- 60870-5-103) or other relevant/ equivalent regulations
Frequency	50 Hz \pm 1 Hz
Continuous rating	Not less than system capacity individually
DC input Operating range	200 V to 1000V nominal
Total Harmonic Distortion	less than 3 %

Operating temperature Range	0 to 55 deg C
Housing cabinet	PCU to be housed in suitable cabinet with minimum IP65 standard
Inverter efficiency	> 95 % at full load.
Power Control	MPPT
Output Voltage Range on AC Side	415 +/- 10%, V AC PCU/ Solar Inverter voltage range should be configured as per site requirements.
Output Frequency Range	As per standard
DC System Voltage	The electrical safety of the array installation is of the utmost importance. Array electrical configuration shall be in such way, that, the MPPT shall operate with maximum efficiency, between the, low and high temperature of the site.
Power Factor	0.95 inductive to 0.95 capacitive
Ambient Temperature Range	0° to 55° C
Electrical Protection safety	The PCU shall include appropriate self-protective devices/ Arrangements

Over/ Under Voltage	<p>a) Mains (Grid) over-under voltage and frequency protection. Over</p> <p>b) Voltage protection against atmospheric lightning. Protection</p> <p>c) Against voltage fluctuations in the grid itself and internal faults in the power conditioner, operational errors and switching transients.</p>
Full Proof Protection	<p>Against ISLANDING.</p> <p>Note: -</p> <p>MOV type surge arrestors on AC and DC terminals for over voltage protection from lightning-induced surges.</p>
Open Circuit & Short Circuit	Full protection against accidental open circuit, short Circuit and reverse polarity at the input.
Internal faults	Inbuilt protection for internal faults including excess temperature, commutation failure, overload and cooling fan failure is obligatory.
Galvanic Isolation	Galvanic isolation is provided to avoid any DC component being injected into the grid and the potential for AC components appearing in the array.
Earth Fault Supervision	An integrated earth fault detection device is provided to detect eventual earth fault on DC side and shall send message to the supervisory system.
Automatic reconnection after the Grid failure is Restored	PCU has facility to reconnect the Inverter automatically to the grid following restoration of grid, subsequent to grid failure condition.
Array Tracking	Included authentic tracking of the Solar array's maximum Power operation voltage (MPPT).
Array Ground Fault	Provided

Operator Interface	LCD and key pad operator interface are provided.
Fault Conditions	Automatic fault conditions reset for all the parameters like voltage, frequency and/ or black-out.
Unbalanced Output Load	PCU is able to withstand and unbalanced output load to the extent of 30%.
Special Features	<p>PCU must have a single phasing protection with auto islanding. PCU must be totally isolated (except for minor grid detection circuit) during non-production of energy.</p> <p>PCU must have power factor correction.</p> <p>PCU should have the KVAR import & export less than 5%</p>
Internal Wiring	Standard CU wiring, with flame resistant insulation
Cabling Practice	<ul style="list-style-type: none"> a) Cables: PVC Cu cables as per relevant international Standards b) Cable connections: suitable terminations c) PVC channel with covers to house the cables
High Voltage Test	PCU with stand high voltage test of 2,000 Vrms between either the input or the output terminals and the cabinet (chassis).
EMI (Electromagnetic Interface)	PCU shall not produce EMI which cause malfunctioning of electronic & electrical instruments including communication equipment which are located within the facility in which the PCU is housed.

Display on Front Panel and Indicators	<ul style="list-style-type: none"> a) Instantaneous PCU ac power output and the DC voltage current and power input b) Accuracy of display: 3% of full scale factor or better c) Display visible from outside the PCU enclosure. d) Operational status of the PCU, alarms, trouble indicators and AC and DC disconnect switch positions shall also be Communicated by appropriate messages or indicator lights on the front cover of the PCU enclosure.
Emergency OFF	Emergency OFF button should be located at an appropriate position on the unit
Factory Testing	<ul style="list-style-type: none"> a) Tested to demonstrate operation of its control system and the ability to be automatically synchronized and connected in parallel with a utility service, prior to its shipment. b) Operation of all controls, protective and instrumentation circuits demonstrated by direct test if feasible or by simulation operation conditions for all parameters that cannot be directly tested. c) Demonstration of utility service interface protection circuits and functions, including calibration and functional trip tests of faults and isolation protection equipment. d) Operation of start up, disconnect and shutdown controls also to be tested and demonstrated, stable operation of the PCU and response to control signals shall also be tested and demonstrated. e) Factory testing includes measurement of phase currents, efficiencies, harmonic content and power factor. All tests shall be performed 25, 50, 75 and 50% of the rated nominal power. f) Factory test report: Should be supplied with the unit.

MPPT	<p>Maximum power point tracker is integrated in the power conditioner unit to maximize energy drawn from the array. The MPPT shall be microprocessor based to minimize power losses. The MPPT shall have provision (manual setting) for constant voltage operation</p>
Remote Monitoring System	<p>A remote monitoring system shall be included with each photovoltaic system.</p> <p>Usually such monitoring systems are connected and synchronized with the inverters.</p> <p>The monitoring system should transmit the following data in real-time to a central server and store it:</p> <ul style="list-style-type: none"> • DC currents, voltages and power. • AC currents, voltages and power. • Irradiation, ambient temperature, module temperature and wind speed. • Error logs
	<p>This data may be transmitted either using the available LAN or Ethernet RJ45.</p> <p>This data shall be accessible by CWDB and Concerned agency through a secure login account.</p> <p>The stored data should be represented through hourly, daily, monthly, etc. graphs and easily downloadable in .csv or .xls format.</p>

Codes and Standards	<p>The quality of equipment supplied shall be controlled to meet the guidelines for engineering design include in the standards and codes listed in the relevant ISI and other standards, such as</p> <ul style="list-style-type: none">a) IEEE 928: Recommended criteria for terrestrial PV power systems.b) IEEE 929 Recommended practice for utility interface of Residential and intermediate PV systems.c) IEEE 519 Guide for harmonic control and reactive compensation of static power controllers.
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Sno.	Description	Make
1	SPV Modules	Rayzon / Luminous / Adani
2	Inverter (GTI)	Luminuos / Sungrow
3	SPV Modules mounting structure – GI Pipes Strut Channels –	Standard make - Tin-shed APL / TATA APL / TATA
4	AC/DC Distribution units as per specifications	Standard make
5	<ul style="list-style-type: none"> • Cables requirement as per design Al Armoured for AC – 3.5 Core • (For DC cable (copper) 4 sq mm) 	Polycab / Hawells / RR / KEI
6	Earthing Kit (Cu Bonded Chemical Earthing	VK Power /True Power
7	Lighting arrestors	Copper Bonded regular type
8	Other Accessories	Standard

Forms:

LETTER OF TRANSMITTAL	
FORM-A :	FINANCIAL INFORMATION
FORM-B :	SOLVENCY CERTIFICATE
FORM-C :	STRUCTURE & ORGANISATION
FORM-D :	NO CONVICTION CERTIFICATE
FORM-E :	UNDERSTANDING THE PROJECT SITE
FORM-F :	NO DEVIATION CERTIFICATE
FORM-G :	INTEGRITY PACT (DELETED)
FORM-H :	LIST OF EQUIPMENTS /OFFICE DETAILS
FORM-I :	EXPERIENCE OF BIDDER
FORM-J:	CV DETAILS OF PERSONNEL / STAFF PROPOSED FOR THE PROJECT

LETTER OF TRANSMITTAL

To,
Executive Director,
Central Wool Development Board, Jodhpur
First Floor, BSNL Building,
Manji Ka Hatha, Paota, Jodhpur. 342 006 (Rajasthan)
Phone No.- 0291-2433967, 2616328

Subject: Submission of bids for the work

Sir,

Having examined the details given in the bid document for the above work,
I/we hereby submit the relevant information.

1. I/we hereby certify that all the statement made and information supplied in the enclosed forms A to J and accompanying statement are true and correct.
2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible similar works:

Sr. No.	Name of Work	Certificate From

Certificate: It is certified that the information given in the enclosed eligibility bid are correct. It is also certified that I / We shall be liable to be debarred, disqualified / cancellation of enlistment in case any information furnished by me / us is found to be incorrect.

Enclosures: Seal of bidder

Date of submission:

Signature(s) of Bidder(s).

FORM 'A': FINANCIAL INFORMATION

- 1) Financial Analysis: Details to be furnished duly supported by figures in balance sheet/ profit & loss account for the last three years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

Years	Gross Annual turnover	Profit/Loss (After Tax)
2023-24		
2022-23		
2021-22		

- 2) Financial arrangements for carrying out the proposed work.
- 3) Solvency Certificate from Bankers of the bidder in the prescribed Form "B".

Signature of Chartered Accountant
(with Seal)

Signature of Bidder(s).
(with Seal)

**FORM "B": FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED
BANK**

This is to certify that to the best of our knowledge and information that
M/s. Sh..... having marginally
noted address, a customer of our bank are/is respectable and can be
treated as good for any engagement up to a limit of

Rs (Rupees).

This certificate is issued without any guarantee or responsibility on the
bank or any of the officers.

Signature)

For the Bank

NOTE:

1. Banker's certificates should be on letter head of the Bank, sealed in
cover addressed to tendering authority.
2. In case of partnership firm, certificate should include names of all
partners as recorded with the Bank.

FORM "C": STRUCTURE & ORGANISATION

Sr. No.	Particulars	Details Submitted by Bidder
1.	Name & address of the bidder	
2.	Telephone no./Telex no./Fax no.	
3.	Legal status of the bidder (attach copies of original document defining the legal status) (a) An Individual (b) A proprietary firm (c) A firm in partnership (d) A limited company or Corporation	
4.	Particulars of registration with various Government Bodies (attach attested photocopy)	
	Organization/Place of Registration 1. 2. 3.	Registration No.
5.	Names and titles of Directors & Officers with designation to be concerned with this work.	
6.	Designation of individuals authorized to act for the Organization	
7.	Has the bidder, or any constituent partner in case of partnership firm Limited Company/ Joint Venture, ever been convicted by the court of law? If so, give details.	
8.	In which field of MEP for construction the bidder has specialization and interest?	
9.	Any other information considered necessary but not included above.	

Signature of Bidder(s)

FORM-D: FORMAT FOR No-Conviction Certificate

[On the letter head of the Organization]

Subject: No-Conviction Certificate for --- (Name of the work / project)

This is to certify that _____(Name of the organization),
having registered office at _____(Address of the registered office) has
never been blacklisted or restricted to apply for any such activities by any
Central / State Government Department or Court of law anywhere in the
country.

This is also to certify that M/s _____(Name of
Organization), is not involved in any form of Corrupt and Fraudulent practices
in past and will never be involved in future.

Yours faithfully,

Signature, name and designation of the Authorized signatory

Name and seal of Bidder

Date:

Place:

FORM-E: FORMAT FOR UNDERSTANDING THE PROJECT SITE

(On Bidder Letter Head)

To,

Executive Director,
Central Wool Development Board, Jodhpur
First Floor, BSNL Building,
Manji Ka Hatha, Paota, Jodhpur. 342 006 (Rajasthan)
Phone No.- 0291-2433967, 2616328

Subject: Undertaking of the Site Visit for SUPPLY, INSTALLATION, TESTING AND COMMISSIONING (SITC) OF 250,35,50 KWP GRID CONNECTED ROOFTOP SOLAR PV POWER PLANT AT VARIOUS LOCATIONS

Sir,

I/we hereby certify that I/we have examined & inspected the site & its surrounding satisfactorily, where the project is to be executed as per the scope of works. I/ We are well aware about the following

- Dismantling of existing utilities
- Location of the proposed building and its allied works.
- Site clearance and no cutting off the matured trees.
- Topography and contouring of the land where the project is to be executed to understand the cutting & filling during the construction and about depth of column/ foundation below the plinth beam.
- Nature of the ground & sub-soil of the site and accessibility to the site.
- Existing surrounding road level to finalize plinth beam level as per standard norms.
- Location of Existing Sewer line & Water pipe line network to connect the proposed building and allied works to make the building functional.
- Location of existing Electric Sub-Station to supply the electricity for the proposed building and allied works to make the building functional.

I / We hereby submit our BID considering above all facts gathered during site visit and each & every aspect have been considered in the Quoted cost of the project since it is Engineering, Procurement and Construction (EPC) Contract. I / We hereby confirm that no extra/additional cost shall be claimed on above aspects.

Yours faithfully,

Signature, name and designation of the Authorized signatory

Name and seal of Bidder

Date:

Place:

FORM-F: FORMAT FOR NO DEVIATION CERTIFICATE

[To be submitted on Bidder's Letter Head]

To,
Executive Director,
Central Wool Development Board, Jodhpur
First Floor, BSNL Building,
Manji Ka Hatha, Paota, Jodhpur. 342 006 (Rajasthan)
Phone No.- 0291-2433967, 2616328

Subject: No Deviation Certificate for (name of Work /Project)

Dear Sir,

With reference to above this is to confirm that as per Tender conditions we have visited site before submission of our Offer and noted the job content and site condition etc. We also confirm that we have not changed/modified the above tender document and in case of observance of the same at any stage it shall be treated as null and void.

We hereby also confirm that we have not taken any deviation from Tender Clause together with other reference as enumerated in the above referred Notice Inviting Tender and we hereby convey our unconditional acceptance to all terms & conditions as stipulated in the Tender Document.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null and void.

Thanking you,

Yours faithfully,

Signature, name and designation of the Authorized signatory

Name and seal of Bidder

Date:

Place:

FORM-H: LIST OF EQUIPMENTS/OFFICE DETAILS

Sr. No	Name of Equipment& office details	Qty/address	Own/Lease/Hire

Signature, name and designation of the Authorized signatory

Name and seal of Bidder

Date:

Place:

FORM-I: EXPERIENCE OF BIDDER

Sr. No.	Name of work	Name of client, contact no & address	Work Order		Date of completion of work	Actual cost of work completion	Details of similar works executed	Remarks
			Doc. No & Date	Amount				

As per the Check List mentioned in the Qualification Criteria

Signature of Bidder

**FORM-J: CV DETAILS OF PERSONNEL / STAFF PROPOSED FOR THE
PROJECT**

Sr. No.	Staff	Qualification	No of Person required
1	Team Leader	B.E. Electrical with minimum 07 years of work experience	01
2	Electrical / Solar Expert – <u>fully available at Site</u>	B.E/Diploma –Civil/Electrical with minimum 05 years of work experience	01

If bidder is not provided the above manpower per day Rs. 1500/- shall be deducted

Please provide detailed CV, copy of degree and work experience certificates of above listed staff.

VOLUME-III FINANCIAL BID

SCHEDULE-B (PRICE BID FOR SITC OF 250 KWP,35 KWP,50 KWP GRID CONNECTED ROOFTOP SOLAR PV POWER PLANT AT VARIOUS LOCATION)

Sr. No.	Particulars-	Unit of Measurement	Quantity	Rate per Kwp (Rs.)	Total Amount (Rs.)
1	<u>SITC OF 250 KWP GRID CONNECTED ROOFTOP SOLAR PV POWER PLANT AT CSWRI, Avikanagar, Tonk, Malpura, Rajasthan 304501</u>	KWP	250		
2	<u>SITC OF 35 KWP GRID CONNECTED ROOFTOP SOLAR PV POWER PLANT AT NRC CAMEL Shiv bari Jorbeer, Jodhpur Bypass, Bikaner, Rajasthan 334001</u>	KWP	35		
3	<u>SITC OF 50 KWP GRID CONNECTED ROOFTOP SOLAR PV POWER PLANT AT NRC YAK West Kameng District, Dirang, Arunachal Pradesh 790101</u>	KWP	50		

Note: All above amount is inclusive of GST.

- Any financial quote below 20% of the estimated quote will not be considered, in accordance with quality and standard guidelines.
- Recovery on A/C of labour cess Deduction of 1% Labour cess. The Deduction of labour welfare cess @ 1% of Tender Cost shall be deducted from Contractors Bill

Signature of Contractor

Competent authority