

NIT No: WBSEDCL/SPGD/ Solar Inverter 10 MW SPVPP Chharrah /2025-26/NIT- 72 Date- 28.04.2025

# **TENDER DOCUMENT**

**For**

**Procurement, Supply, Installation, Testing and commissioning  
including warranty obligation of one no. 1.25 MW Solar  
Inverter at Chharrah 10MW (AC) Solar PV Power Plant in  
Block Purulia, Dist. Purulia, West Bengal.**



**WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED**

**(A Govt. of West Bengal Enterprise)**

**Data Centre Complex, Admin Building, 3rd Floor,  
AF Block, Action Area-I, New Town, West  
Bengal, Kolkata-700163**

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## **BID DETAILS**

<b>Sl. No.</b>	<b>ITEM</b>	<b>DETAILS</b>
1	NIEt No.	NIEt No: WBSEDCL/SPGD/ Solar Inverter 10 MW SPVPP Chharrah /2025-26/NIT- 72 Date- 28.04.2025
2	Name of work	Procurement, Supply, Installation, Testing and commissioning including warranty obligation of one no. 1.25 MW Solar Inverter at Chharrah 10MW (AC) Solar PV Power Plant in Block Purulia, Dist. Purulia, West Bengal.
3	Tender Fee	NIL
4	Estimated Cost of the work (Cost excluding of GST)	Rs. 36,67,500/-
5	Earnest Money	Rs. 73,350/-
6	Validity of Earnest Money (in case of Bank Guarantee)	06 (six) months from the date of opening of Technical Bid and with a claim period of another 03 (three) months.
7	Date of publishing of NIEt Documents (Online)	02.05.2025 at 02:00 PM
8	Document download start date (Online)	02.05.2025 at 02:30 PM
9	Last Date of submission of queries, if any, for the pre-bid meeting (Only through email)	06.05.2025 up to 12:00 PM

10	Pre Bid Meeting (Date & Venue)	07.05.2025 at 2:00 PM Office of the Chief Engineer, Solar Power Generation Department (SPGD) 3rdFloor, Data Centre Complex, Street No. 41, Action Area-I, New Town, Kolkata– 700163
11	Bid proposal submission start date (Online)	08.05.2025 at 04:00 PM
13	Last date & time for submission of bid (Online)	26.05.2025 up to 04:00 PM
14	Last Date and time of physical submission of EMD BG	27.05.2025 up to 1:00 PM
15	Date and time of opening of Technical Bid / Part –A (online)	28.05.2025 at 04:00 PM
16	Date and time of opening of Price Bid / Part-B	To be notified after evaluation of Technical Bids
17	Time of completion of work	180 (One Hundred Eighty) days
18	Validity of offer	180 (One Hundred and Eighty) days from the date of opening of Technical Bid.

## **PROJECT DETAILS**

ITEM	DETAILS
Capacity of the Power Plant	10 MW (AC)
Location	Chharrah 10MW Solar Power Plant, Block –Purulia, Dist. Purulia, WB.
District	Uttar Dinajpur
State	West Bengal
Site Latitude	23.36° N
Site longitude	86.43° E
Nearest Railway Station	Chharrah railway Station. Distance between the Railway stations and project site is 2.5KM approx



## West Bengal State Electricity Distribution Company Limited

(A Government of West Bengal Enterprise)

CIN: U40109WB2007SGC113473

### Solar Power Generation Department

3rd Floor, Data Centre Complex, Street No. 41, Action

Area-I, New Town, Kolkata – 700 163

Website: www.wbsedcl.in, e-mail: cesolar@wbsedcl.in

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NleT No: WBSEDCL/SPGD/ Solar Inverter 10 MW SPVPP Chharrah /2025-26/NIT- 72 Date- 28.04.2025

### NOTICE INVITING e-TENDER

West Bengal State Electricity Distribution Company Limited (WBSEDCL) intends to replace 1250 KW Solar Inverter at Chharrah 10 MW ground mounted SPVP Plant at Purulia District of West Bengal. In this connection, the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL invites e-tender in two parts for the work of **“Procurement, Supply, Installation, Testing and commissioning including warrantee obligation of one no. 1.25 MW Solar Inverter at Chharrah 10MW (AC) Solar PV Power Plant in Block Purulia, Dist. Purulia, West Bengal.”** from bona-fide, resourceful and technically eligible developers having experience in execution of similar nature of work as per eligibility criteria as mentioned below in the form of technical and financial proposals containing as mentioned in the tender document.

The details of Tender and estimated cost: -

Sl. Number	Name of the plant	Total estimated value (INR) (Excluding of GST)
1	10MW SPVPP at Chharrah in Purulia District, West Bengal	36,67,500/-

#### Schedule of Dates for e-Tendering:

Sl. No.	Activity	Date & Time
1	Publishing Date	02.05.2025 at 02:00 PM
2	Document Download startdate	02.05.2025 at 02:30 PM
3	Last date of submission of queries if any for pre-bid meeting (only through email) within	06.05.2025 up to 12:00 PM
4	Date of Pre-bid Meeting	07.05.2025 at 2:00 PM
5	Start date of Bid submission (online)	08.05.2025 at 04:00 PM
6	End date of Bid submission (online)	26.05.2025 up to 04:00 PM
7	Last Date and time of physical submission of EMD BG	27.05.2025 up to 1:00 PM
8	Technical Bid opening date	28.05.2025 at 04:00 PM
9	Financial Bid opening date	To be notified after evaluation of Technical Bids

## **Terms & Conditions of the Tender Notice:**

1. **Registration of Bidder:** Intending eligible bidders desirous of participating in the tender will have to be enrolled and registered with the Government e-Procurement System and may like to log on to the website <https://wbidders.gov.in> for the above tender.
2. **Digital Signature Certificate (DSC):** Bidders willing to take part in the process of e- tendering are required to obtain Class 2 or Class 3 Digital Signature Certificate (DSC) in the name of person who will sign the tender, from any authorized Certifying Authority (CA) under the Controller of Certification Agencies (CCA), Govt. of India. The bidders are required to register the fact of possessing the Digital Signature Certificates through the Registration System available in the website. Tenders shall be submitted online and intending bidders should download the tender documents from the website stated above, directly with the help of the DSC. This is the only mode of collection of tender documents. Details of submission procedure are given in "Instructions to Bidders (ITB)".
3. **Tender Fee:** Not Required.

### **4. Earnest Money Deposit:**

An Earnest money for bidding shall have to be submitted: Rs. 73,350 /-

For payment EMD following payment options are available through online mode:

- i. Net-banking through Payment Gateway
- ii. RTGS/NEFT payment: On selection of RTGS/NEFT as the payment mode, the e-Procurement portal will show a pre-filled challan having the details to process RTGS/NEFT transaction. The bidder will print the challan and use the pre- filled information to make RTGS/NEFT payment using his bank account. Once the payment is made, the bidder will come back to the e-Procurement portal to continue the bidding process after expiry of a reasonable time to enable the RTGS/NEFT process to be completed.
- iii. Submission of EMD through BG: For submission of EMD in the form of BG, bidders will have to opt for EMD Exemption in e-tender portal and upload scanned copy of BG in the EMD exemption document upload section. Physical copy of BG shall be submitted at the office of tender inviting authority as per respective clauses of NIT.

EMD amount can be paid either in online mode or submitted through Bank Guarantee (BG) in full. Partial payment through online mode and remaining submission through BG is not allowed.





### **General Instructions for Online Payment:**

- The bidder will have to mandatorily pay through Net-banking facility once Net- banking mode is opted for payment.
- Status of NEFT/RTGS payment through Challan for a bid may take time for bank settlement which is updated in 24 Hrs. (approx.). As such bidders opting to pay through NEFT/RTGS mode shall make payment well before 24 Hrs. to avoid any complicity.
- The bank account used for payment of EMD by the bidders shall be maintained operative until the completion of tendering process. All refunds will be made mandatorily to the Bank A/c from which the payment of EMD has been initiated.

### **Refund/Settlement of EMD Amount:**

- For unsuccessful bidders, EMD amount submitted against the tender shall be refunded automatically, through an automated process, by NIC portal on receipt of updated status of any bid.
- For successful bidders, EMD will be refunded from WBSEDCL authority after completion of tendering process and following due procedures.
- The bank account used for payment of EMD by the bidders shall be maintained operative until the completion of tendering process. All refunds will be made mandatorily to the Bank A/c from which the payment of EMD has been initiated.

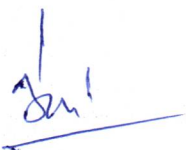
For any queries related to payments and refunds, bidders will have to communicate with ICICI Customer Support, viz, 033-40267512/13 since payment gateway facility used by E-tender portal is maintained by ICICI.

Successful bidder(s) shall have to mandatorily create vendor id through WBSEDCL Web Portal Vendor Corner, if not created earlier.

No interest shall be claimable on Earnest Money Deposit.

5. The Earnest Money as per clause no. 16 of ITB shall be submitted through online payment mode as described above or in the form of Bank Guarantee (BG) on any Scheduled Bank as per Annexed Pro-forma 3 initially valid for 06 (six) months from the bid submission start date with a claim period of another 03(three) months and subject to further extension, if required. The bidder shall not claim any interest on Earnest Money Deposit. Earnest Money in any other form or amount will not be accepted. EMD shall have to be submitted as stipulated in ITB. If the offer is submitted without or inadequate Earnest Money, the bid will not be opened. Incomplete offer will be liable for rejection and Tender Fee Deposits will be forfeited.

6. **Bid Validity:** The Tender and





7. Offer shall remain valid for a minimum period of 180 days from the date of opening of the Technical Bid. However, WBSEDCL, on the merit of the case, may request extension of validity of the offer for a further suitable period without any change in terms & conditions of the original offer.
8. All other information as well as terms and conditions, which are not covered above, will be available in Instructions to Bidders, General Conditions of Contract, Special Conditions of Contract, Technical Specification and specimen Pro-forma of this tender.
9. The bidder or their duly authorized representative should attend the Pre-bid Meeting at the stipulated date and time as mentioned in the Key date's schedule.
10. WBSEDCL is not bound to accept the lowest tender and reserves the right to cancel any or all the tenders unilaterally without assigning any reason what-so-ever. The decision of the Tender Inviting Authority will be final and binding on all concerned and no challenge against such decision will be entertained. In any circumstance, cost of the bidding will not be reimbursed/ returned by the Tender Inviting Authority.
11. **Disqualification of Bidders:** Any evidence of unfair Trade Practices including over charging, price fixing, cartelization etc. as defined in various statutes, will automatically disqualify the bidders.
12. **Amendment of the Bid Documents:** The Tender Inviting Authority reserves the right to modify, amend or supplement the Tender Document. Any corrigendum, notification concerned to this tender will be published in the e-tender portal <https://wbtenenders.gov.in> and it will be treated as part and parcel of the tender. The bidders are, therefore, advised to follow the website for such corrigendum, notification etc.
13. All the important correspondence must be done through declared authorized email id with original scanned copy of documents/letter in company's letter head/pad. However hard copies should reach our office through post/ by hand from your end.
14. Any further information related to this tender may be had from the following office:

Office of the Chief Engineer

Solar Power Generation Department,

West Bengal State Electricity Distribution Company Limited (WBSEDCL) 3rd

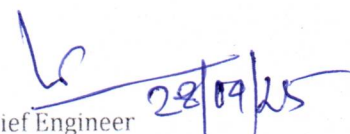
Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town,

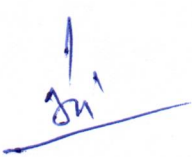
Kolkata - 700 163.

Website : [www.wbsedcl.in](http://www.wbsedcl.in)

Contact Tel. Nos. : +91 9230961800/02/15/09

Email id : [cesolar@wbsedcl.in](mailto:cesolar@wbsedcl.in)

  
Chief Engineer  
Solar Power Generation Department



## **INSTRUCTION TO BIDDERS (ITB)**

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## **1. NAME OF THE WORK**

Procurement, Supply, Installation, Testing and commissioning including warranty obligation of one no. 1.25 MW Solar Inverter at Chharrah 10MW (AC) Solar PV Power Plant in Block Purulia, Dist. Purulia, West Bengal.

## **2. REGISTRATION OF CONTRACTOR**

Any contractor willing to take part in the process of e-tendering will have to be enrolled and registered with the Government e-Procurement System. Through logging in to <https://wbtenders.gov.in>, the contractor has to go for the e-Tendering link as given on the web portal.

## **3. DIGITAL SIGNATURE CERTIFICATE (DSC)**

Each contractor is required to obtain Digital Signature Certificate (DSC) for submission of bids from the approved service provider of the National Information's Centre (NIC) on payment of requisite amount. Details are available at the website.

## **4. TENDER FEE**

No fee is applicable for purchasing this tender document for the e-tender.

## **5. SITE VISIT**

The bidders are advised that they must visit the proposed site of installation and get themselves conversant with the actual site condition prior to submission of the bids. The bidder may visit the proposed site during the presence of the officials of WBSEDCL giving prior information in writing or through e-mail to this office.

## **6. PROCESS TO BE CONFIDENTIAL**

- 6.1** After the public opening of bids information relating to the examination, clarification, evaluation of comparison of Bids and recommendations concerning the award of contract shall not be disclosed to bidders or other person not officially concerned with such process until the Award of the Contract to the successful bidder has been announced.
- 6.2** Any effort by a bidder to influence WBSEDCL in the process of examination, clarification evaluation and comparison of Bids, and in decisions concerning the Award of contract may result in the rejection of his Bid.

## **7. ELIGIBILITY CRITERIA FOR PARTICIPATION IN THE BIDDING:**

### **7.1 General**

This Invitation for Bids, issued by WBSEDCL is open to sole proprietorship firm/Partnership firm/ LLP and Company (ies) incorporated in India as per Company Act, 1956/2013 (with amendment from time to time), barring those bidders, which have been placed under Holiday Listing and the term/ duration of such listing has not yet expired.

A Bidder shall not have a conflict of interest. Any Bidders found to be having a conflict of interest shall be disqualified. The bidder may be considered to have conflict of interest with one or more parties in this bidding process, if:

- i. They have a controlling partner in common,
- ii. They receive or have received any direct or indirect subsidy from any of them; or
- iii. They have the same legal representative for purpose of this bid; or
- iv. They have a relationship with each other, directly or through common third parties, that puts them in position to have access to information about or influence on the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
- v. A bidder submits more than one bid in the bidding process, either individually [including bid submitted as agent / authorized representative on behalf of one or more manufacturer(s) or through Licensee – Licensor route, wherever permitted as per the provision of Qualification requirement for Bidders] or as partner in a joint venture, except for alternative offers permitted under Invitation to Bid. This results in disqualification of all such bids. However, this does not limit the participation of a Bidder as a sub-contractor in another Bid, or of a firm as a sub-contractor in more than one bid; or
- vi. A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specification of the materials and services/works that are subject of the bid, or
- vii. The Bidder, directly or indirectly shall not be a dependent agency of the WBSEDCL.

This bidding is open to any manufacturer or erector or integrator who provides satisfactory evidence concerning the following that he:

- i. is a qualified manufacturer or erector who supply, erect, testing and commission of the type specified and has adequate technical knowledge and practical experience;
- ii. does not anticipate change in the ownership during the proposed period of work (if such a change is anticipated, the scope and effect thereof shall be defined);
- iii. has adequate financial stability and status to meet the financial obligation pursuant to the scope of the works;
- iv. has adequate field services organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment as required by the Specifications and Documents; and
- v. has established quality assurance systems and organization designed to achieve high levels of equipment reliability, both during his manufacturing and field installation activities.

The bidder must submit Certificate of Incorporation/ Registration of Company/Trade license, GST Registration (GSTIN), PAN Card, Labor License, Electrical Contractor License, PF Registration, Employees' State Insurance Registration and Professional Tax Registration as per the applicability.

A power of attorney, duly notarized, indicating that the person(s) signing the bid has (ve) the authority to sign the bid and thus that the bid is binding upon the Bidder during full period of its validity.

The above stated requirements are a minimum and WBSEDCL reserves the right to request for any additional information and also reserves the right to reject the Proposal of any Bidder, if in the opinion of Employer, the qualification data is incomplete or the Bidder is found not qualified to satisfactorily perform the Contract.

## **7.2 Technical Eligibility Criteria**

7.2 (a) Experience in execution of any Solar PV Power Project or Solar Project related works or any electrical works under SNA/Govt./SECI/PSU Power Utility/Statutory body/Sub-vendor of any Govt. Solar Projects shall be technical eligibility criteria.

- (b) The bidder should furnish documentary evidences of satisfactory performances of the said works/projects by way of submission of completion and performance certificates issued by the purchaser ( Plant/Substation Owner) up to the Bid submission Start date.

The certification by the bidder for his own work shall not be acceptable.

- (c) Bidder should submit, in support to the above, the list of works/projects completed/commissioned along with their work order/ LOI and the successful commissioning/completion certificates from the purchaser/ employer.
- (d) The bidder should submit a list of contracts of similar nature presently under execution giving details of client, completion time, scope and value of work.
- (e) A list of key professionals is to be furnished by the bidder as the Project Team Structure for the proposed work mentioning their experience and qualification.
- (f) The bidder shall have to possess Electrical Contractors License issued by statutory Authority in Central/State Level. A copy of the License shall have to be uploaded in the specified folder of the e-tender and also to be furnished along with the Bid hard copy.
- (g) No Joint venture and no consortium are allowed to participate.

## **7.3 Financial Eligibility Criteria**

- (a) The bidder should be a registered company incorporated in India under the Companies Act, 1956 or 2013 (with amendment from time to time) or Partnership Firm registered as per Partnership Act 1932 or Statutory Body or LLP Act 2008 and must submit Trade license, Certificate of Company Incorporation / Registration Certificate, PAN Card, PF Registration, Employees' State Insurance Registration, Professional Tax Enrolment Certificate, GST Registration (GSTIN), Labour License, Electrical Contractor License as per the applicability.
- (b) The bidder shall submit reports on the financial standing i.r.o. solvency of bidder company/ firm as certified by bankers, Audit report for companies registered under Companies Act and Tax Audit report for partnership firms for last 03 (three) Financial Years (2021-22, 2022-23, 2023-24)
- (c) The bidder shall submit Income Tax Return for the last 03 (three) Assessment Years (2022-23, 2023-24, 2024-25) and latest Income Tax Clearance Certificate from the appropriate authority.
- (d) The bidder should have a Minimum Average Annual Turnover @ 30% of the estimated cost of during last 03 (three) consecutive financial years (2021-22, 2022-23, 2023-24) for actual participation in the bidding process.
- (e) Bidder shall have Liquid Assets (LA) and/ or evidence of access to or availability of fund-based credit facilities of not less than 10% of the estimated cost of the project and the Banker should confirm that the Credit facility is earmarked for the Work specified under Bid. Liquid assets would include cash (and equivalents), bank deposits, securities that can be freely traded and receivables having age less than 6 month (CA certificate to be provided) which has general certainty of getting received (CA certificate for received up to 6 months).
- (f) Net Worth for the each of the last three Financial Years should be positive. Net worth means the sum total of the paid up capital and free reserves (excluding reserves created out of revaluation) reduced by aggregate value of accumulated losses (including debit balance in profit and loss account for current year)



and intangible assets. Net worth must be positive in last three consecutive financial years (2021-22 to 2023-24) if audited Financial Statement for FY 2024-25 is not available.

- (g) The bidder should submit letter of undertakings, evidence of access to or availability of credit/facilities, financial proposal containing Price Bid and Price Break-up as per the Pro-forma given in the tender document.
- (h) For the purpose of this particular bid, bidder shall meet the following minimum commercial criteria in past 5 (Five) years up to the Bid submission start date.
  - i) Experience in **single completed work** of project execution in Solar PV Power Project or Solar Project related works or any electrical works as per Cl. 7.2 costing not less than the amount equal to **50%** of the estimated amount of the project actually applied for in the bidding process.

Or

- ii) Experience in **two completed work** of project execution in Solar PV Power Project or Solar Project related works or any electrical works as per Cl. 7.2 costing not less than the amount equal to individually **40%** of the estimated amount of the project actually applied for in the bidding process.

Or

- iii) Experience in **three completed work** of project execution in Solar PV Power Project or Solar Project related works or any electrical works as per Cl. 7.2 costing not less than the amount equal to individually **30%** of the estimated amount of the project actually applied for in the bidding process.

## **8. CLARIFICATION OF BIDDING DOCUMENTS & PRE-BID MEETING**

- 8.1** The bidder shall be deemed to have carefully examined the Bidding Document and also to have been satisfied him as to the nature and character of the system to be supplied and installed against the contract, and all relevant matters & details should there be any discrepancy or, obscurity in the meaning of any of these clauses of the e-Tender documents or if there be any query of the intending Bidder, the Bidder shall set forth such discrepancies, doubt, obscurity or queries and submit the same through our email-id [cesolar@wbasedcl.in](mailto:cesolar@wbasedcl.in) or physically at Solar Power Generation Department (SPGD), 3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town, Kolkata – 700 163 at least 24 hours before scheduled Pre-Bid meeting for necessary clarification by WBSEDCL & further action in this regard.
- 8.2** To assist in the examination evaluation and comparison of Bids, WBSEDCL may ask the bidder individually for a clarification of his Bid including break up of unit rates. The request for clarification and the responses shall be in writing or by cable but no change in the price or substance of the Bid shall be sought, offered or permitted except as required to conform the correction of arithmetical errors discovered by WBSEDCL during the evaluation of the Bids in accordance with clause no. 22 of ITB.
- 8.3** The Pre-bid meeting will be held on scheduled date and time as mentioned NlET at the office of the Chief Engineer Solar Power Generation Department (SPGD), 3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town, Kolkata – 700 163.
- 8.4** Non-attendance at Pre-Bid discussion will not be a cause for disqualification of bidders. The clarification given in the Pre-Bid discussion shall be final and binding on the bidder, being a part the original Bid Documents.

## **9. DEVIATION**

This tender is a 'No Deviation' tender. However, request for any deviation by the bidder (s) vides their queries prior to pre-bid meeting, if tenable, will be informed in the Pre Bid meeting. Proforma 2 shall be filled and submitted by the bidder.

## **10. AMENDMENT OF BIDDING DOCUMENTS**

The Tender Inviting Authority reserves the right to modify, amend or supplement this Tender Document. Any corrigendum, notification concerned to this NIT will be Published in the e-tender portal <https://wbtenders.gov.in>. The bidders are advised to follow the website regularly for such corrigendum, notification etc.

## **11. LANGUAGE OF THE BID**

The offer prepared by the bidder and all correspondence and documents relating to the bid exchanged by the bidder and WBSEDCL shall be written in English. The desired documents and any other document submitted by the bidder shall be written in English.

## **12. PROCEDURE OF SUBMISSION OF BIDS**

Bids are to be submitted online through the website <https://wbtenders.gov.in>. All the documents uploaded by the Tender Inviting Authority form an integral part of the tender document. Bidders are required to upload the entire tender document along with the other required documents through the above website within the stipulated date and time as given in the NIT.

The bid shall comprise of two parts and to be submitted simultaneously – One is Technical Proposal and other is Financial Proposal.

The bidders need to download the documents, fill up the particulars in the designated cell and upload the same in PDF in the designated location of the Technical Bid.

The bidders need to download the Price Bid & Price Break up Pro forma as attached with this document, fill up the same and upload that document in the designated location of the Financial Bid.

All The documents uploaded should be digitally signed using Digital Signature Certificate (DSC). Bidders should take note of all the addendum/corrigendum related to the bid and upload the latest documents as part of the bid.

**In addition, a complete set of hard copy except Price Bid maintaining the sequence as per Form-I (Check List) in spiral binding of all the documentary evidences qualifying for their bid, duly stamped and signed by the authorized person of the bidder as uploaded in the website <https://wbtenders.gov.in> shall have to be submitted along with the hard copy of EMD (Bid Security) with super-scribing of the NIT no., Name of the bidder, Name of the work etc. on the sealed envelope on not before bid submission end date and time.**

## TECHNICAL PROPOSAL

### (A.1) Statutory Cover:

#### a) To be submitted in “Drafts” folder

- i. Tender Fee: NIL
- ii. Earnest Money Deposit (EMD):

Scanned copy of the Bank Guarantee against Earnest Money Deposit (EMD), in favour of “WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED” payable at Kolkata or documentary evidence of Online Bank Fund Transfer Statement for deposition of Earnest Money as prescribed in clause no. 16 of ITB.

#### b) To be submitted in “Annexure” folder

- i. Application for Tender (*Vide Proforma – I*)

#### c) To be submitted in “NIT” folder

- i. Notice Inviting Tender (NIT)
- ii. Addenda /Corrigenda/Pre-Bid response (if published) duly signed with stamp.

*Note: Bidders are to keep track of all the Addendum / Corrigendum issued with a particular tender and upload all the above digitally signed along with the NIT. Tenders submitted without the Addendum / Corrigendum will be treated as informal and liable to be rejected.*

#### d) To be submitted in “Forms” folder

- i. Check List (*Vide Form – I*)
- ii. Summary statement of average annual turnover / yearly audit report (*Vide Form – V*) for a period of the last three financial years, certified by the Auditor appointed under Companies Act, 2013. In case the bidder is not a company, certificate of Tax Auditor may be submitted.
- iii. Statement of orders executed during last five years (*Vide Form -VI*)
- iv. Pro-forma for undertaking to be submitted by the Bidders (*Vide Form – IV*)
- v. Format of Letter of Bid (*Vide Form – III*)

*(Only downloaded copies of the above documents are to be uploaded, virus scanned and digitally signed by the bidder)*

*Note: Tenders will be summarily rejected if any item in the statutory cover is missing.*

### (A.2) Non-Statutory Cover (My Document)

#### i. Company Details:

- 1) Proof of Company Incorporation / Trade License
- 2) Power of Attorney, duly notarized, indicating that the person(s) signing the bid has (ve) the authority to sign.

#### ii. Certificates:

- 1) PAN Card details.
- 2) Professional Tax (PT) Registration.
- 3) GST Registration Certificate (GSTIN).
- 4) PF registration certificate.
- 5) ESI Certificate.
- 6) Labour License Certificate.
- 7) Electrical Contractors License.

**iii. Financial Information:**

- 1) Income Tax Return for the last 03 (three) AY
- 2) Proforma for Evidence of Access to or Availability of Credit / Facilities (*Vide Proforma - 7*)

**iv. Credential:**

Copy of the Order(s) / LOA (s) / Contract Agreement(s) issued by the purchaser (plant owner), Completion Certificates, Commissioning Reports, and satisfactory performance of the work shall be submitted in support of minimum eligibility criteria as per Clause no. 7 of ITB.

**v. Declaration:**

- 1) List of Orders in hand  
*(The bidder shall submit the list of orders in hand mentioning the order value to be executed within one year from the date of submission of bid)*
- 2) Bill of Material (*Vide Proforma - 6*)
- 3) List of key personnel available and proposed to be engaged for the project mentioning their experience and qualification

Note:

- i. Failure of submission of any of the above mentioned document(s) as stated in (A.1) & (A.2) above and as per applicability will render the bid liable to be summarily rejected for both statutory and non-statutory cover.
- ii. The execution of work shall be treated as complete execution of contract, not partial execution of contract.
- iii. The documents uploaded should be digitally signed using the Digital Signature Certificate (DSC).

**FINANCIAL PROPOSAL**

The financial proposal should contain the following documents in one cover (folder).

**Bill of Quantities (BOQ)**

The financial proposal will contain Price Bid and Price Break- up respectively in the document. The bidder should fill up the documents by their respective cell and upload given in Pro-forma: 2, Pro-forma: 3 A and Pro-forma: 3 B.

**Note:**

- i. The bidder must furnish information in the specified Pro-forma with their offer. If information are not furnished in desired format or in stipulated copies, the offer of respective bidder may be treated as non-responsive and may be considered as ineligible and the bidder shall have no claim whatsoever, on this account.
- ii. The documents uploaded should be digitally signed using the Digital Signature Certificate (DSC).

**13. SUBMISSION OF ORIGINAL COPIES OF DOCUMENTS OF EARNEST MONEY DEPOSIT AND HARD COPIES OF UPLOADED DOCUMENTS:**

- i. **Mode of Payment:** EMD must be submitted through on-line payment mode as described in Clause no.-16. Payment in any other form will not be accepted.
- ii. **Procedure of Submission:** All the documents shall be submitted to the place of submission mentioned below as per following instruction:
  - ❖ **Envelope 1:** Shall contain Acknowledgement of successful transfer of fund

from beneficiary bank or Original copies of Bank Guarantee (BG) as Earnest Money Deposit (EMD) i.e., Form-I (Checklist).

- ❖ **Envelope 2:** Shall contain rest of the documents except Price Bid mentioned in the Form-I (Checklist) maintaining proper sequence.
- ❖ **Envelope 3:** Shall contain both the above envelopes mentioning the title on the envelope.

iii. **Place of submission:** The original copies of Acknowledgement or BG, towards Earnest Money shall be submitted in the following office:

Solar Power Generation Department (SPGD), 3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town, Kolkata – 700 163.

**Time of submission:** The original Bank Guarantee/ Acknowledgement against Earnest Money Deposit (EMD) must be submitted physically at the office of the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL, under sealed cover superscribing the name of the work with NIT no., name of the bidder etc. within the scheduled date & time as specified in the NIT.

If the bidder fails to submit the original copies within the due date and time his tender will not be opened and his bid will be rejected.

#### **14. DISQUALIFICATION / INELIGIBILITY OF BIDDERS**

Even though the bidders meet the qualifying criteria, they shall be disqualified if they

- have been involved in the corrupt / fraudulent / collusive / coercive practices and/or,
- have made misleading or false representation(s) in the forms, statements and attachments submitted in proof of the qualification requirements and/or,
- have found to be guilty in formation of cartel for submitting their bids and/or,
- have any Record of poor performance such as abandoning the works, serious litigation history, or financial failures etc. (basis of assessment of suitability shall be decided by WBSEDCL based on the parameters laid down by him on these issues) and/or,
- Have been declared ineligible for poor performance/failure issued by the Govt. of India/State Govt. Dept./PSUs/SNAs and other Statutory Organizations etc.

#### **15. TIME SCHEDULE**

The basic consideration and the essence of the Contract shall be the strict adherence to the time schedule specified in the bidding document and incorporated in the contract for the proposed services.

#### **16. EARNEST MONEY**

An Earnest money for bidding shall have to be submitted: Rs. 73,350/-

An Earnest money for bidding shall have to be submitted as per following:

For payment of EMD following payment options are available through online mode:

- i. Net-banking through Payment Gateway
- ii. RTGS/NEFT payment: On selection of RTGS/NEFT as the payment mode, the e - Procurement portal will show a pre-filled challan having the details to process RTGS/NEFT transaction. The bidder will print the challan and use the pre-filled information to make RTGS/NEFT payment using his bank account. Once the payment is made, the bidder will come back to the e- Procurement portal to continue the bidding process after expiry of a reasonable time to enable the RTGS/NEFT



process to be completed.

- iii. Submission of EMD through BG: For submission of EMD in the form of BG, bidders will have to opt for EMD Exemption in e-tender portal and upload scanned copy of BG in the EMD exemption document upload section. Physical copy of BG shall be submitted at the office of tender inviting authority as per respective clauses of NIT.

EMD amount can be paid either in online mode or submitted through Bank Guarantee (BG) in full. Partial payment through online mode and remaining submission through BG is not allowed.

Bank details for purchasing of BG are given below:

Bank Name: State Bank of India, Bank Branch: Bikash Bhaban G.O.C.,  
Account Name: WBSEDCL, Account Number: 36548991592  
IFSC Code: SBIN0007816.

**General Instructions for Online Payment:**

- The bidder will have to mandatorily pay through Net-banking facility once Net-banking mode is opted for payment.
- Status of NEFT/RTGS payment through Challan for a bid may take time for bank settlement which is updated in 24 Hrs. (approx.). As such bidders opting to pay through NEFT/RTGS mode shall make payment well before 24Hrs, to avoid any complicity.
- The bank account used for payment of EMD by the bidders shall be maintained operative until the completion of tendering process. All refunds will be made mandatorily to the Bank A/c from which the payment of EMD has been initiated.

**Refund/Settlement of EMD Amount:**

- For unsuccessful bidders, EMD amount submitted against the tender shall be refunded automatically, through an automated process, by NIC portal on receipt of updated status of any bid.
- For successful bidders, EMD will be refunded from WBSEDCL authority after completion of tendering process and following due procedures.
- The bank account used for payment of EMD by the bidders shall be maintained operative until the completion of tendering process. All refunds will be made mandatorily to the Bank A/c from which the payment of EMD has been initiated.

For any queries related to payments and refunds, bidders will have to communicate with ICICI Customer Support, viz, 033-40267512/13 since payment gateway facility used by E-tender portal is maintained by ICICI.

Successful bidder(s) shall have to mandatorily create vendor id through WBSEDCL Web Portal Vendor Corner, if not created earlier.

No interest shall be claimable on Earnest Money Deposit.

The bid security amount (EMD) shall be released to the successful bidder after receiving Performance Security/Contract Performance from the contractor within the stipulated date mentioned in the Letter of Award (LOA). But the EMD of the unsuccessful bidders will be returned within Forty-Five (45) days after finalization of this contract for which a request letter has to be initiated by the concerned unsuccessful bidders to the Chief Engineer Solar Power Generation Department (SPGD), 3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town, Kolkata – 700 163. In case, WBSEDCL cancel the Tender on his own for any reason, the EMD submitted by the bidders will be returned without any interest subsequently, for which a request letter has to be initiated by the authorized tender applicant.

## **17. FORFEITURE OF EMD**

EMD shall be forfeited, if

- a) The Bidder modifies/withdraws the Bid after Bid opening and during the period of Bid Validity and/or,
- b) The bidder has been found practicing corrupt or fraudulent or collusive or coercive practices during bidding process and/or,
- c) The bidder has been found guilty of Formation of Cartel.
- d) The successful bidder fails within the specified time limit to Sign the Contract Agreement and/or,
- e) The successful bidder fails within the specified time limit to submit the Contract performance/Performance security.
- f) The successful bidder fails to submit unconditional Acceptance of LOA within the specified time limit.

## **18. PERFORMANCE SECURITY/CONTRACT PERFORMANCE**

The Successful bidder shall submit a Performance Guarantee within 15 (Fifteen) days from the date of issuance of LOA in the form of Bank Guarantee (PBG) for an amount not less than 10% (ten percent) of the total value of the contracts valid initially for a period of 01 (one) year with a claim period of 03 (three) months and further extendable upto defect liability Period.

## **19. FORFEITURE OF PERFORMANCE SECURITY**

Performance Security/Contract Performance shall be forfeited if,

- a) The successful bidder do not execute the work after placement of Letter of Award (LOA) and/or,
- b) The successful bidder discontinue the work without prior permission of the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL and/or,
- c) The successful bidder fails to install/procure the specific required material as mentioned in the tender document and/or,
- d) The contractor fails to submit a fresh BG 30 (thirty) days prior to expiration of the previous BG against performance security of appropriate amount as per the terms and conditions and/or,
- e) The successful bidder fails to rectify/replace of the defective/damaged equipment(s)/work(s) within the Defect Liability Period.

## **20. PRICE REVISION**

Revision/withdrawal of price bid after opening of Techno-commercial bid will not be entertained, under any circumstances until and unless it is sought for. In case it is asked by the tendering authority, the mode of communication too should strictly be followed by the bidder as specified in Writing by WBSEDCL.

## **21. VALIDITY OF OFFER**

The offer against tender should remain valid for a minimum period of 180 days from the next day of opening of Technical Bid. However, WBSEDCL may, on the merit of case, request extension of validity of the offer for a further suitable period without any change in terms & conditions of the offer.

## **22. DETERMINATION OF RESPONSIVENESS**

- 22.1** Prior to be detailed evaluation of Bids, WBSEDCL will determine whether each Bid is substantially responsive to the requirements of the bidding documents.
- 22.2** For the purposes of this Clause a substantially responsive Bid is one which conforms to all the Terms, Conditions and Specifications of the bidding documents without immaterial deviation or reservation. A material deviation or reservation is one which affected in any substantial way the scope quality or performance of the works, or which limits in any way the responsibilities or liabilities of the Bidders or any right of the Owner as required in the Bidding documents and the rectification of which deviation or reservation would affect unfairly the competitive position of other bidders presenting substantially responsive Bids.
- 22.3** If a Bids is not substantially responsive to the requirements of the bidding documents it will be rejected by WBSEDCL and may not subsequently be made responsive by the bidder having corrected or withdrawn the nonconforming deviation or reservation.
- 22.4** Although details presented in this NlET have been compiled with all reasonable care, it is Bidder's responsibility to satisfy itself that the information / documents are adequate and that there is no conflict between various documents / stipulations. No dispute or claims shall be entertained on this account. Bid proposal preparation is the responsibility of the bidder and no relief or consideration can be given for errors and omissions.

## **23. CORRECTION OF ERRORS**

- 23.1** Bids determined to be subsequently responsive will be checked by WBSEDCL for any arithmetic errors in computation and summation. Errors will be corrected by WBSEDCL as follows:
- (a) Where there is discrepancy between amount in figures and in words, the amount in words will govern.
  - (b) Where there is discrepancy between the unit rate and the total amount derived from the multiplication of the unit rate and the quantity, the unit rate as quoted will govern unless in the opinion of WBSEDCL there is an obviously gross misplacement of the decimal point in the unit rate in which event the total amount as quoted will govern and the unit rate will be corrected.
- 23.2** The Bidder should ensure that the prices furnished in various price schedules are consistent with each other. In the case of any inconsistency in the prices furnished in the price schedules WBSEDCL shall be entitled to consider the highest price for the purpose of evaluation and use the lowest of the prices in this schedule for the purpose of Letter of Award (LOA).
- 23.3** The amount stated in the Bid form will be adjusted by WBSEDCL in accordance with the above procedure for the correction of errors and shall be considered as binding upon the Bidder, if the bidder does not accept the corrected amount of Bid, his Bid will be rejected and the Bid Guarantee forfeited.
- 23.4** In case of any discrepancies between the rate or price as quoted in Pro-forma 2 and corresponding rate or price in Pro-forma 3 A and 3 B, then rate or price as quoted or arrived in Pro-forma 3 A and 3 B shall prevail and evaluation shall be done accordingly.

## **24. OPENING AND EVALUATION OF TENDER**

### **24.1 Opening of Technical Proposal**

- i. Technical proposals will be opened by the Tender Inviting Authority or his authorized representative electronically from the website stated above, using their Digital Signature Certificate.
- ii. Technical proposals for those tenders, who's EMD have been received, will only be opened. Proposals corresponding to which original copy of BG/Online transaction receipt towards EMD has not been received, will not be opened and will stand rejected.
- iii. Statutory Cover (vide Clause 12.A.1) will be opened first and if found in order, Non-statutory Cover (vide Clause 12.A.2) will be opened. If there is any deficiency in the Statutory Documents, the tender will summarily be rejected.
- iv. Decrypted (transformed into readable formats) documents of the Statutory and Non-statutory Covers will be downloaded for the purpose of evaluation.
- v. If the information furnished by the bidder in objective manner is not confirmed by the uploaded documents then the bidder will be out rightly rejected for Price Bid opening. The documents related to the furnished online information based on which the evaluation takes place will only be considered. If the bidder uploads any other document, it will be given no cognizance.

### **24.2 Technical Evaluation of Tender**

- i. While evaluation, the Tender Inviting Authority or his authorized representative may summon the bidders and seek clarification / information or additional documents or original hardcopy of any of the documents already submitted and if the same cannot be produced within the stipulated time frame, their proposals will be liable for rejection.
- ii. The summary list of bidders, whose bids will be found techno- commercially eligible, will be uploaded in the web portals. Date of opening of financial bid will be intimated to the techno-commercially qualified bidders.

### **24.3 Opening and Evaluation of Financial Proposal**

- i. Financial proposals of the bidders declared techno-commercially eligible, will be opened electronically by the Tender Inviting Authority from the web portal stated above on the prescribed date.
- ii. After opening of the financial proposal the preliminary summary result containing inter-alia, name of bidders and the rates quoted by them will be uploaded.
- iii. The Tender Accepting Authority may ask any of the bidders to submit analysis to justify the rate quoted by that bidder.
- iv. Bids determined to be subsequently responsive will be checked by WBSEDCL for any arithmetic errors in computation and summation. Errors will be corrected by WBSEDCL as follows:
  - (a) Where there is discrepancy between amount in figures and in words, the amount in words shall be considered.
  - (b) Where there is discrepancy between the unit rate and the total amount derived from the multiplication of the unit rate and the quantity, the unit rate as quoted shall be considered.
- v. Conditional discounts/ rebates, if any, offered by the bidders shall not be taken in to consideration for evaluation.

**24.4** Revision/withdrawal of Financial Proposal by the bidder after opening of Technical Proposal of the tender will not be allowed if it is not sought by the Tender Inviting Authority.

## **25. APPLICATION FOR TENDER**

The bidder should submit the Application for Tender as per Proforma: 1 attached with this tender document. Not submitting the Proforma will cause for rejection of the respective bid.

## **26. AWARD CRITERIA**

WBSEDCL will accept the lowest valid tender, evaluated based on the Financial Proposals, for awarding of the Contract. However the Tender Accepting Authority does not bind himself to do so and reserves the right to reject any or all the tenders for valid reasons.

## **27. LETTER OF AWARD**

Solar Power Generation Department (SPGD), WBSEDCL will place Letter of Award (LOA) to the successful bidder to convey the decision of the tender inviting authority before the expiration of the period of validity of the offer, if the whole tender is not cancelled/ postponed by the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL.

The contractor should submit the contract agreement, Bank Guarantee for Performance Security and any other document as desired within the stipulated date as mentioned in the said LOA, failing which the job may subject to be cancelled and EMD of the successful bidder will be forfeited.

Notwithstanding anything stated elsewhere in the bid documents, the Contract to be entered into will be treated as a divisible Supply, Civil construction, Erection & Commissioning Contract.

## **28. CURRENCIES OF BID**

The unit rate and the price of each item given as per the BoQ shall be quoted by bidder only in Indian Rupees.

## **29. CONTRACT AGREEMENT**

The contractor (successful bidder) shall have to be entered into a Contract Agreement within stipulated time as mentioned in the Letter of Award (LOA) with West Bengal State Electricity Distribution Company Limited (WBSEDCL) for the proper fulfillment of the contract as per Proforma:08. All Documents/ Correspondences relevant to this tender evolved during the tendering process and firming up of the Contract and during execution of the work will form part of the agreement. The successful bidder shall have to submit a copy of the whole tender document duly signed and stamped by the authorized representative of the successful bidder.

## **30. INDEMNITY BOND**

The contractor (successful bidder) shall have to produce Indemnity Bond as per Proforma: 09 within stipulated time as mentioned in the Letter of Award (LOA) to the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL.

## **31. RIGHT TO ACCEPT OR REJECT ANY OR ALL OFFERS**

The Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL reserves the right to reject any or all the offers without assigning any reason whatsoever.

If the successful bidder does not enter into Contract Agreement and/or submit the



performance security/contract performance and/or Indemnity Bond within stipulated time as mentioned in the Letter of Intimation, his EMD will be forfeited and the job may subject to be cancelled.

**32. CONTRACT PRICE**

Contract price is quoted price plus applicable GST but inclusive of all other charges.

## GENERAL CONDITIONS OF CONTRACT (GCC)

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## DEFINITION OF TERMS:

Unless the context otherwise requires, the following terms whenever used in this document have the respective meaning:

- i. The **‘Company’/‘Employer’/‘Department’** shall mean the WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LTD. (WBSEDCL), having its Office at Vidyut Bhavan, Block-DJ, Sector-II, Kolkata – 700091 and shall include its successors and assigns.
- ii. The **‘Engineer-in-Charge’** shall mean the Engineer designated by the Company for the purpose of this contract. He will authorize the Controlling Officer and Supervising Officer for carrying out the work.
- iii. **‘Company’s representative’** shall mean any person or persons of consulting firm appointed and remunerated by the Company to supervise, inspect, test and examine workmanship and materials of the work under this scope.
- iv. The **‘Contractor’** shall mean the Bidder who will be awarded with the contract by the Company and shall include the contractor’s executor’s administrators, successors and permitted assigns.
- v. The **‘Sub-Contractor’** shall mean the person named in the Contract for any part of the works or any person to whom any part of the contract has been sublet by the contractor with the consent in writing of the Engineer and will include the legal representatives, successors and permitted assigns of such persons.
- vi. **‘Equipment/materials’** shall mean and include all type of construction equipment & materials etc. required for true and satisfactory completion of the work under this contract.
- vii. **‘Workmanship’** shall mean the method/manner in which the jobs of the different items, whether included in the schedule or not but are required for true & satisfactory completion of the work under this contract, are executed.
- viii. **‘General conditions’** shall mean all the clauses of General conditions of the proposed contract stated hereinafter. The specification shall mean the specification annexed to or issued with the General Conditions and shall include the schedule and drawings attached thereto.
- ix. The term **‘Services’** shall mean all works to be undertaken by the contractor as laid down under the head “scope of work” or elsewhere in the specification enclosed. When the words “approved”, “subject to Approval”. “As directed”, “Accepted”, “Permitted” etc. are used, the approval, judgment, direction etc. are understood to be a function of Company.
- x. **‘Day’** means a calendar day beginning and ending midnight.
- xi. **‘Month’/‘Calendar month’** means not only the period from the first of a particular month, but also any period between a date in a particular month, and the date previous to the corresponding date in subsequent month unless specifically stated otherwise.
- xii. **‘Week’** means seven consecutive calendar days.
- xiii. **‘Writing’** shall include any manuscript, type written, printed or other statement reproduced in any visible form.
- xiv. The work **‘Site’** shall mean the site of proposed work as detailed in the specification or any other place where the work is to be executed under the contract.
- xv. **‘Date of Commencement’** shall mean the date of actual handing over of site whichever is later.
- xvi. **‘Date of Completion’** shall mean the date of final completion of the project in all respect.

- xvii. **‘Specifications’** shall mean collectively all the terms and stipulations contained in this document including the conditions of contract, technical provisions and attachments thereto and list of corrections and amendments.
- xviii. **‘Drawings’** means collectively all the accompanying general drawings as well as all detailed drawings, which may be used from time to time or desired by WBSEDCL.
- xix. **‘Approval’** shall mean the written approval of WBSEDCL and/the statutory authorities, wherever such authorities are specified by any codes or otherwise.
- xx. **‘Manufacturer’** shall refer to the party proposing to design/engineering and construct in complete or in part a particular job/work at their works/premises.
- xxi. **‘Labourer’** shall mean all categories of labour engaged by the Contractor, his sub-contractors and his piece workers for work in connection with the execution of the work covered by the specifications. All these labourers will be deemed to be employed primarily by the Contractor.
- xxii. **‘Plant’/‘Equipment’/‘Stores’** means and include plant and machineries to be provided under the contract.
- xxiii. **‘Delivery of Plant’/‘Delivery of Equipment’** shall be deemed to take place on delivery of the plant/equipment in accordance with the terms of the contract complete in all respect after approval by WBSEDCL.
- xxiv. **‘Tests on Completion’** shall mean all such tests as are prescribed by the specification to be made by the Contractor to the satisfaction of WBSEDCL before the plant and equipment are taken over by WBSEDCL and this also includes those tests not specifically mentioned in the specification but required under various BIS codes and relevant Electricity Acts and Rules.
- xxv. **‘Urgent Works’** shall mean any urgent measures, which in opinion of the Engineer-in-Charge, become necessary at the time of execution and/or during the progress of work to obviate any risk of damage to the structure, or required to accelerate the progress of work or which become necessary for security or for any other reason WBSEDCL may deem expedient.

## 1. NAME OF THE WORK

**Procurement, Supply, Installation, Testing and commissioning including warranty obligation of one no. 1.25 MW Solar Inverter at Chharrah 10MW (AC) Solar PV Power Plant in Block Purulia, Dist. Purulia, West Bengal**

## 2. SCOPE OF WORK

Scope of work includes Design, Engineering, Manufacture/ Procurement, Supply of one (01) no. Hitachi/Fimer or any reputed make 1.25 MW Solar inverter, testing at manufacturers works, inspection, packing and forwarding, unloading and safe storage at site, associated civil works including site development, services, permits, installation and incidentals, erection, testing and commissioning with Warrantee obligation at Project site. The equipment and materials the Solar PV Power Plant with associated system shall include but not be limited to the following equipment and sub-systems:

- a) Contractor shall prepare and submit the Detailed Design Report to WBSEDCL which must contain schedule of site works, detailed specifications of each equipment and works (*as mentioned in the technical specification chapter of the tender document*), all necessary drawings and associated calculations for selection of different equipment for the plant based on the site location and relevant code of practice.

The Detailed Design Report shall also contain necessary test certificates and approvals as per relevant standard and practice for all the equipment, catalogues, quality assurance etc.

Bill of Quantity (BOQ) for each job including tools and spares, quality control procedures on materials & works and other conditions of contract prior to the execution of the work shall also be a part of the Detailed Design Report.

The contractor needs to submit their Detailed Design Report to WBSEDCL within the time specified in the 'Time Schedule' of the Letter of Award (LOA). The contractor shall submit 03 (three) sets of the Draft Detailed Design/Drawing Report along with editable soft cop in a compact disk for approval.

After finalization of the same by WBSEDCL, the contractor shall submit six (6) sets of the finalized Detailed Design Report along with editable soft copy in a compact disk to carry out further course of action.

- b) The contractor shall supply all materials and equipment required for erection, testing & commissioning of the Solar Inverter. The supply of materials shall also include transportation, loading and unloading at work site.
- c) Timely procurement and transportation to site in properly packed condition of all equipment, materials and miscellaneous item required to complete the project.
- d) Contractor shall arrange proper storage at site for the equipment and materials at his own cost and risk. The complete system shall be under the custody of the contractor till successful commissioning and handing over the plant to WBSEDCL. WBSEDCL in no case shall be held responsible for any loss/damage/theft of materials/equipment; so long those shall continue to remain under the custody of the contractor.
- e) The contractor shall carry out all necessary civil works to complete the work. Prior to execution of civil works drawing and design shall get approved from WBSEDCL.
- f) The Contractor shall dismantle the defective inverter from the LCR. WBSEDCL personnel shall remove healthy/ working items from the defective inverter and the contractor shall handover the remaining materials of old inverter to Purulia Division Store.



- g) Installation, testing and commissioning of new Solar Inverter should be done as per the approved time schedule.
- h) Any modification if required in the existing Air Duct of Inverter is to be done by the contractor making it compatible for the newly installed Solar Inverter.
- i) The contractor needs to submit 03 (three) sets of user's manual and 02 (two) sets of Operation and Maintenance format book suitably useable for 60 months.
- j) The contractor shall adhere to safety practices during erection, commissioning and subsequent operation and maintenance of the system including fire prevention.
- k) The contractor needs to clean all the debris from the site before final commissioning of the plant.
- l) Any other items not specifically mentioned in the technical specification and/ scope of work but which are required for successful completion and satisfactory operation of the solar power plant are deemed to be included in the scope of work/specification.
- m) The contractor should submit the total system warranty as per clause no. 22 of GCC in a 100 Rs. Non-judicial Stamp Paper (Pro-forma for the same should be approved by WBSEDCL) duly indemnified at the time of submission of completion report.

### **3. CONTROLLING OFFICER'S DECISION**

Controlling Officer's decision is final in respect of all matters which are left to the decision of the Controlling Officer including the granting or with-holding of certificates.

If, in the opinion of the contractor, a decision made by the Controlling Officer is not in accordance with the meaning and intent of the contract, the contractor may file with the Controlling Officer, within 07 (seven) days after receipt of the decision, a written objection to the decision. Failure to file an objection within the allotted time will be considered as an acceptance of the Controlling Officer's decision and the decision shall become final and binding.

### **4. COMMENCEMENT & COMPLETION TIME**

Date of commencement should be reckoned from the date of issuance of LOA/ date of actual handing over of site whichever is later.

The whole work must be completed within 180 (One hundred eighty) days from the date of commencement.

A detailed time schedule for the site work has to be prepared and submitted by the contractor to the Controlling officer.

All works under the contract must be completed by period of completion mentioned in NIT while portions of work as per program settled in consultation with the Controlling Officer shall be completed by the date stipulated in the said program. It is to be noted that time is the essence of the contract and any default on the part of the contractor to complete the work within the stipulated date/dates aforesaid or within the time as may be extended in writing by the Controlling Officer subject to the payment of liquidated damages, the Company shall have the right, without prejudice to any other clauses, to terminate contract forthwith and to take possession of the balance work/materials and have the same allotted to any other agency and the contractor shall be liable to compensate the loss that may be occasioned to the Company on that account. Any letter in writing by the Controlling Officer shall be treated as conclusive on behalf of the Company.

### **5. SCHEDULE OF WORK**

Before actual commencement of the work, the contractor shall submit a time bound

schedule for approval of the Controlling Officer who have the authority to make additional alteration, and substitution of such program including modification and time to time as decided by the department and contractor shall strictly follow such modified schedule for timely completion of the work.

## **6. VARIATION, ADDITIONS AND OMISSIONS**

The Contractor shall not modify the work except under direction in writing by WBSEDCL. WBSEDCL reserves the right to vary the capacity of projects up to +/- 10 % (plus or minus ten percent) on pro rata basis. Contract will be executed accordingly on such capacity variation.

However, any item(s) not included in the schedule or specification but required for completion of the work shall have to be carried out/supplied without any extra price. While submitting the offer the bidder shall consider price of those items and may indicate separately as additional deliverable items.

## **7. CONFIDENTIALITY**

The Contractor, or any entity affiliated with the Contractor, shall not disclose to any unauthorized person any information and/or data that may be supplied to him/her by the WBSEDCL or by any other organization, under the directions of the WBSEDCL. All such documents shall be the property of the WBSEDCL or any information that may have come to his/her knowledge directly or indirectly by virtue of the assignment.

## **8. DEPARTMENTAL MATERIAL**

Departmental material shall not be issued to the contractor for the work except under special circumstances.

## **9. FORCE MAJEURE**

Force Majeure means any circumstances beyond the control of the parties, including but not limited to:

- a. War and other hostilities, (whether war be declared or not), invasion, act of foreign enemies, requisition or embargo.
- b. Rebellion, revolution, insurrection, military power and civil war.
- c. Riot, commotion or disorder, except where solely restricted to employees of the Contractor or of his sub-contractors.
- d. Earthquake, flood, cyclone and such other natural disaster affecting Contractor's work.

WBSEDCL shall neither be responsible nor be liable to bear any compensation for any interruption of work in the site, except, due to the above force majeure condition.

Upon the occurrence of any situation of Force Majeure, the Contractor shall endeavor to continue to perform his obligations under the Contract so far as reasonably practicable. The Contractor shall notify within a week in written to the controlling officer of the steps he proposes to take including any reasonable

Alternative means for performance which is not prevented by Force Majeure. The Contractor shall not take any such steps unless directed to do so by the controlling officer.

## **10. EXTENSION OF TIME**

An extension of time without imposition of Liquidated Damage (LD), may be granted for delay in execution of work provided there is no fault whatsoever on the part of the contractor. Such extension may only be granted on the basis of application to be submitted within the schedule date of completion by the contractor who has to establish that the

extension of time required by him is not due to his fault.

The Contractor may claim an extension of the Time for Completion if he is or will be delayed in completing the Works by any of the following causes:

- a. Extra or additional work ordered in writing by WBSEDCL.
- b. Suspension of work ordered in writing.
- c. Delay by any other Contractor engaged by WBSEDCL, affecting this Contract.
- d. Delay in handover of site by WBSEDCL
- e. Force Majeure.

The Contractor shall give notice to WBSEDCL of his intention to make a claim for an extension of time within 15 days of the occurrence of any of the above cause(s). The notice shall be followed as soon as possible by the claim with full supporting details. WBSEDCL shall after verification allow the Contractor for updating of the program chart as facts may justify.

#### **11. LIQUIDATED DAMAGE**

If the Contractor shall fail to complete the total works within the time prescribed herein or extended time for completion, then the Contractor shall pay to the Company a sum amounting to half percent (0.50%) of the "Contract value of work" as liquidated damages for such delay for every week or part thereof which shall elapse between the time prescribed or extended time as the case may be and the date of completion of the work in each phase, subject to a maximum of ten percent (10%) of the contract price.

The Company may, without prejudice to any, all other method of recovery deducts the amount of such damages from any money in their hand due or which may become due to the contractor. The payment or deduction of such damages shall not relieve the contractor from this obligation to complete the works or from any other of his obligations and liabilities under the contract.

If there is a valid acceptable reason for delay of execution, the Controlling Officer may at his discretion consider lower down of the liquidated damage or even waive the liquidated damage on having written prayer from the contractor along with valid reason.

#### **12. DEFECTIVE MATERIAL**

If in the opinion of the Engineer, any of the machineries/equipment/materials etc. brought to the site for use are not of the quality or kind specified in the contract and/or are unfit for the work, he shall be at liberty to order the removal of the said items and the contractor shall remove the same within twenty four (24) hours after notice has been given to him and if he fails to remove them within the time the engineer may cause them to be removed anywhere at the risk of the Contractor and any cost incurred in so doing shall be deducted from the dues to the contractor under the contract. In such case, items as prescribed by the Controlling Officer or his representative are to be substituted immediately.

#### **13. RISK PURCHASE**

If the contractor fail, on receipt of the order, to take up the work within reasonable period or leave the work site after partial execution of the work WBSEDCL shall have the liberty to get the work done through other agency at his own risk and additional amount if any. If the situation so warranted to compel WBSEDCL to cancel the order placed on the Contractor, he shall be liable to compensate the loss or damage, which WBSEDCL may sustain due to reasons of failure on his part to execute the work in time.

#### **14. DEFECT LIABILITY PERIOD**

The term 'Defect Liability Period' shall mean the period of 05 years (Five years) for Solar Inverters from the Date of issuance of Certificate of Completion by WBSEDCL. If any defect against the new installed Solar Inverter/ any other material is found within the defect liability period, the contractor shall be liable to rectify/replace the materials at their own cost and responsibility.

Defects/rectification work so notified shall have to be attended and completed satisfactorily within the specified date or as deemed justified by the Controlling Officer. For faithful & due fulfillment of all obligations, this defect liability period shall be covered by the performance security/contract performance, already submitted by the contractor.

#### **15. SUBLETTING OF CONTRACT**

The contractor shall not, without the written consent of the Company, assign or sublet any part thereof, other than for raw materials, or for any part of the work provided that any such consent shall not relieve the contractor from any obligation, duty or responsibility under the contract. In the event of sub-letting of contract or any part thereof is permitted, the fact that such permission has been accorded shall not establish any contractual relationship between the approved Sub-vendor and WBSEDCL of any of his liabilities and obligations under the contract.

#### **16. NOTICES**

Unless otherwise stated in the Contract, all notices to be given under the Contract shall be in writing, and shall be sent by personal delivery, Registered post, courier service, facsimile (fax) or Electronic Data Interchange (EDI), e-mail to the address of the relevant party.

Any notice sent by facsimile or EDI shall be confirmed within two (2) days after dispatch by notice sent by airmail post or special courier, except as otherwise specified in the Contract.

Any notice sent by airmail post or special courier shall be deemed (in the absence of evidence of earlier receipt) to have been delivered ten (10) days after dispatch. In proving the fact of dispatch, it shall be sufficient to show that the envelope containing such notice was properly addressed, stamped and conveyed to the postal authorities or courier service for transmission by airmail or special courier.

Either party may change its postal, cable, telex, facsimile or EDI address or addressee for receipt of such notices by ten (10) days' notice to the other party in writing.

Notices shall be deemed to include any approvals, consents, instructions, orders and certificates to be given under the Contract.

#### **17. WBSEDCL'S RIGHT TO TERMINATE CONTRACT & HOLIDAY LISTING**

- If the contractor fails to start the work within a month from the date of issue of the work order, the West Bengal State Electricity Distribution Company Limited shall have the right to cancel the work order with forfeiture of earnest money (Converted into initial security) without giving any notice to the contractor. The contractor may be subjected to holiday listing as per company's policy.
- If the contractor neglects, or fails to proceed with the work proportionate to the scheduled time of completion of the work or fails to complete the work within scheduled time for completion or within the extended time approved by West Bengal State Electricity Distribution Company Limited, the West Bengal State Electricity Distribution Company Limited shall have right to terminate the work order after giving notice in writing to the

contractor. If the contractor fails after 14 (fourteen) days of such notice, to proceed with the work in the manner notified, West Bengal State Electricity Distribution Company Limited shall terminate the contract and call the contractor to take joint measurement along with the Engineer for the finished portion of work. If the contractor does not appear for joint measurement, ex-party measurement by West Bengal State Electricity Distribution Company Limited will be taken as final.

In that case, WBSEDCL shall take possession of the work, site and engage other agency to complete the work. Extra cost, if incurred, to get the unfinished work done through other agency, will be realized from him from his pending bills and security money. In the contract terminated as above, the contractor shall have no claim for compensation against West Bengal State Electricity Distribution Company Limited for any loss or deterioration of any materials that he may have collected or he may have entered into account of the work.

The contractor may be subject to holiday listing as per company's policy.

## **18. APPROVAL**

**Design and Drawing:** The contractor shall have to prepare and submit the designs and drawings associated with civil, mechanical and electrical work which includes design of foundation, structure cable sizing, fabrication work, layout design, wiring diagram etc. and obtain approval prior to the execution of work and for this purpose the contractor shall submit Detailed Design Report for obtaining approval from WBSEDCL. The contents of the Detailed Design Report shall be as mentioned in the scope of work (Clause no. 2 of GCC).

**Testing and Inspection:** Any authorized representative of WBSEDCL shall, at all times, have full access to all parts of the site, places from which natural materials are being obtained, during production, manufacture and construction and be entitled to examine, inspect, measure and test materials and workmanship, and check the progress of manufacture of plant and production of materials/equipment at manufacturer's workshop. No such activity shall relieve the Contractor from any obligation or responsibility. Material Inspection will be carried out after submission of all test reports/certificates and after completion of the manufacturing work, against formal intimation from the contractor. The contractor shall give notice of any material being ready for testing to SPGD, WBSEDCL.

The contractor shall arrange for all the necessary tests required for the project in the premises of the contractor or Sub-contractor and provide assistance, labour, materials, electricity, fuel, stores, calibrated apparatus and instruments as may be necessary to carry out the tests efficiently without any extra charges. If the facilities are inadequate to carry out tests as per standard, the contractor shall have to arrange suitable testing place having all such required facilities and the cost towards this will be on contractor's account.

The contractor shall also bear all charges towards travelling expenses of the Inspecting Team of the Purchaser or the authorized representatives of the Outside Inspecting agency consisting of at least two (2) persons for to and fro journey by Air from purchaser's Headquarter, including boarding and lodging at the place of inspection and transit, if any for the purpose of Inspection and Testing.

WBSEDCL, if desired, will visit the contractor's premises/manufacturer's workshop and may proceed with the routine tests. Arrangements for such program shall be done by the contractor. The inspection setup and instruments must be provided by the contractor within the contract value.

The material shall have to be dispatched at site after inspection and clearance from the purchaser.

WBSEDCL, if desired, may test the delivered product (especially solar module) at site from any accredited laboratory of Govt. of India. The result of that test and subsequent decisions

taken by the controlling officer will be bound to the contractor.

**Rejection:** If, as a result of an examination/testing, any plant, materials, design or workmanship is found defective and/or not in accordance with the Contract, WBSEDCL may reject the plant, materials, design or workmanship by giving notice with reasons. The Contractor shall then promptly make good the defect and/or ensure that the rejected/replaced item complies with the Contract.

**Materials:** Contractor shall obtain prior approval for the materials deliverable under the project from WBSEDCL as mentioned in the technical specification.

#### **19. MODE OF EXECUTION**

The PV power plant equipment shall be procured as a complete package. The entire work shall have to be executed on TURNKEY BASIS.

#### **20. SUBMISSION OF PROGRESS REPORT**

The contractor shall submit the field progress report weekly to the controlling officer for the work. The contractor needs to get approval of the format of the progress report prior to the execution of the work.

#### **21. INSURANCE**

**Freight Insurance:** The Contractor shall arrange for insurance coverage for the equipment, accessories, materials etc. during transportation & delivery at site till successful handover of the plant.

**Execution Insurance:** It is desired that the contractor shall arrange for insurance coverage for the equipment, accessories, materials etc. to be delivered at site till successful commissioning of the plant. As such the bidder shall include the price of such insurance in their price bid as part of the price of work.

#### **22. WARRANTY**

The contractor must ensure that the goods supplied under the contract are new, unused and of most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the contract.

The warranty period of the supplied Solar Inverter will be 05 years (Five years) from the Date of handing over of the entire project work.

The contractor shall remain liable to replace any defective parts that may develop in the supplied Solar Inverter under the conditions provided for by the contract under proper use, and arising solely from faulty design, materials or workmanship, provided always that such defective parts as are not, repairable at site and are not essential in the meantime to the maintenance in commercial use of the plant are promptly returned to the contractor's works at the expense of the contractor unless otherwise arranged.

The contractor will submit Warrantee Certificates of the work & spare parts and materials in a 100 Rs. Non-judicial Stamp Paper (Pro-forma for the same should be approved by WBSEDCL) duly indemnified at the time of submission of completion report. If any defect is found within the warrantee period, contractor will be liable to repair or replace the same at his own cost and risk, within three (72 hours) days from the date of complaint lodged by WBSEDCL.

The OEM shall sign End User Warranty Agreement directly with WBSEDCL. However, the agency is liable to do all the formalities for Warranty Agreement with End user (WBSEDCL) and claiming the warranty to restore the plant within the stipulated time.

## 23. PENALTY

Penalty may be imposed to the contractor for any of the following reasons:

- a. If the contractor fails to repair/replace any defective material/equipment within the downtime or the time period granted by the controlling officer after receiving such prayer from the contractor in writing, the defects will be repaired by WBSEDCL and the amount will be recovered from the Performance Bank Guarantee which has been deposited to WBSEDCL at the time of starting of the work (equivalent to a sum of amounting to ten percent (10.00%) of the contract value).

## 24. LABOUR LICENSE

Contractor will have to obtain Labour License in respect of the above work as per Contract Labour (Regulation & Abolition) Act, 1970 as early as possible.

## 25. PRICE

Price shall be fixed/firm. No escalation shall be paid due to any reason what-so- ever. Price as quoted at column (III) of Proforma 2: Price Bid against Sl. No. 1 &2

should be equal to amount arrived by aggregating the quoted prices for the respective items in Proforma 3 A and Proforma 3 B. In case of any discrepancies between the rate or price as quoted in Proforma 2 and corresponding rates or price in Proforma 3 A & 3 B, then rate or price as quoted or arrived in Proforma 3 A & 3 B shall prevail and evaluation shall be done accordingly.

Amount of Freight Insurance & Execution Insurance shall be quoted in the Proforma: 3 A – Price Break Up For Supply of Solar Inverter & Proforma: 3 B - Price Break Up For Erection Testing And Commissioning of Solar Inverter, respectively considering the clause of Insurance under Clause No: 21 of GCC.

Any action on the part of the bidder to revise the price and/or change the structure of price at his own after the opening of the bid may result in rejection of the bid and forfeiture of the earnest money.

Prices shall be quoted and payable in Indian Rupees only.

## 26. TERMS OF PAYMENT

Payment will be made as per following schedule:

Sl. No.	Work Head	Pattern of Release of Billing Amount
Part A	i. After delivery of the materials/ equipment and safe storage at site.	<b>60%</b> of total amount of materials/equipment supplied as per schedule of the bidder approved by WBSEDCL and the Price Schedule of Pro-forma- <b>3A</b> , shall be paid on pro-rata basis.
	ii. After installation, necessary testing and commissioning	<b>30%</b> of total amount of the Schedule of Prices of Pro- forma- <b>3A</b> shall be paid on pro-rata basis.
	iii. After Final completion as well as handover of the project	<b>Balance 10%</b> of total amount of the Schedule of Prices of Pro-forma- <b>3A</b> shall be paid.

Sl. No.	Work Head	Pattern of Release of Billing Amount
<b>Part B</b>	i. After successful installation of the materials/equipment.	<b>60%</b> of total amount of the Schedule of Prices of Pro-forma- <b>3B</b> shall be paid
	ii. After Testing And Commissioning of the Equipment	<b>Balance 40%</b> of total amount of the Schedule of Prices of Pro-forma- <b>3 B</b> shall be paid

All payments will be made to the Contractor under the contract in Indian rupees only.

The contractor shall submit Invoice in triplicate for release of payment to them. Maximum one no of RA bills per month will be accepted from the awarded agency for processing of payment.

Payment against delivery of materials, as mentioned above in Sl. No-Part A, will be released to the contractor for the materials for which delivery instructions would be issued by the authorized officer of WBSEDCL after successful inspection and testing of the materials carried out at the works of the manufacturer. The materials shall be according to the approved bill of materials.

WBSEDCL shall arrange joint inspection and measurement of work by the representatives of WBSEDCL and the contractor, for releasing payments.

#### **27. TAXES, DUTIES, LEVIES**

- Basic Customs duty and entry tax (wherever applicable) shall be included in the basic bid price by the bidder.
- GST as applicable will be paid extra as per GST Act, 2017.

Tax invoices need to be issued by the bidder for raising claim under the contract showing separately the tax component (CGST, SGST, IGST, Cess as applicable) in accordance with the provisions of the GST Act, 2017.

#### **28. STATUTORY DEDUCTIONS**

All statutory deductions will be made from each RA/Final Bill as per applicability of different laws of the land.

#### **29. HANDING OVER**

The work will be taken over by WBSEDCL after final completion of the work in all respect. During handing over the plant, the contractor shall submit the following documents.

- Completion Certificate including Warrantee Certificates of the work in a 100 Rs. Non-judicial Stamp Paper (Pro-forma for the same should be approved by WBSEDCL) duly indemnified.
- Operation & Maintenance Manual and other information about the equipment.
- Completion certificate as per prescribed format provided by WBSEDCL.

After submitting all the requisite documents as mentioned above, WBSEDCL will hand over the plant to the current O&M vendor

#### **30. CERTIFICATE OF COMPLETION OF WORKS**

Before taking over the works into commercial use, WBSEDCL will issue a certificate of completion based on the following certifications by the Controlling Officer:

- Acceptable quality and workmanship of works after Commissioning by the Controlling Officer or his authorized representative.



### **31. FINAL ACCEPTANCE CERTIFICATES (FAC)**

The Controlling Officer will issue Final Acceptance Certificate (FAC) within 30 (Thirty) days from the date of expiration of 5 (Five) years of defect liability period or the date of rectification of deficiencies/damages/ defects, if any, whichever is later.

# **SPECIAL CONDITIONS OF CONTRACT (SCC)**

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## **1. CODES AND STANDARDS**

All equipment and materials to be furnished under this specification shall be designed, manufactured and tested in accordance with the latest editions of the relevant IS/IEC/MNRE guidelines or as applicable.

The electrical installation shall meet the requirement of Indian Electricity Act, and Indian Electricity Rules as amended up-to-date and also the applicable section of the latest revision of the relevant IS Code of Practice.

The work shall be done in compliance with the IS Specifications, International Electro-technical Commission Codes, Indian Electricity Act 2003 and all applicable laws in India.

## **2. RULES AND REGULATIONS**

The contractor shall comply with all the statutory provisions of the following prevailing Labour Laws in respect of employees engaged by them:

- Contract Labour (Regulation and Abolition) Act 1970,
- Payment of Wages Act 1936,
- Minimum Wages Act 1948,
- Payment of Bonus Act 1965 and amended in 2015,
- Employees' Provident Fund and Miscellaneous Provisions Act 1952,
- Employees Compensation Act 1923,
- Employees State Insurance Act 1948.

## **3. SAFETY**

All units with respect to their location, layout, general arrangement and design and equipment, structural design, etc. shall be safe to the personnel and conform to the relevant safety rules and regulations/statutory requirement issued by the State Government and the Central Government as well as to:

- i. Indian Electricity Rules 2005
- ii. Indian Electricity Act 2003
- iii. Indian Explosives Manual and
- iv. Fire Protection Manual

The bidder shall also provide necessary fencing and lights to protect the public from accident.

Fire extinguishers shall be kept by the bidder at the site of works where there is risk of fire hazard.

Adequate washing facilities shall be provided near the place of work.

When the work is done near any place where there is risk of drowning, all necessary equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provisions shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of work.

These safety provisions shall be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work spot. The persons responsible for compliance of code shall be named by the bidder.

To ensure effective enforcement of the rules & regulations relating to safety precautions, the arrangement made by the bidder shall be open to inspection by the employer and WBSEDCL.

Notwithstanding the above clauses there is nothing in those to exempt the bidder from the operations of any other Act or Rule in force in the Republic of India.

All storage, handling & use of flammable liquids shall be under the supervision of qualified persons.

First aid arrangements with the degree of hazard and with no. of workers employed shall be maintained in a readily accessible place throughout the whole of working hours.

#### **Reporting of Accident:**

All accidents, major or minor, must be reported immediately to WBSEDCL and the contractor will provide first aid to the injured person immediately. The injured person shall report to the First Aid Station along with the 'Injured on work' form as per appropriate Proforma, duly filled in quintuplicate and submit to the Medical Officer of the First Aid Station.

#### **Serious Injuries:**

In case of serious injuries, the following procedure shall be adopted by the contractor.

- To provide first aid at his own First Aid Station.
- To take the injured person to the hospital along with the 'Injured on work' form duly filled in.
- To report the accident to WBSEDCL.

#### **Fatal Accident:**

Fatal accidents must be reported immediately to WBSEDCL as well as to the Police.

#### **Penalty:**

Failure to observe the Safety Rules will make the contractor liable to penalty byway of suspension of work/termination of contract.

Adequate arrangement for proper lighting & guarding shall be made at the worksite.

#### **4. CONSTRUCTION POWER**

Contractor has to make his own arrangement of power connections/supply for utilization during construction stage of the project.

#### **5. WATER FOR CONTRACTOR'S USE**

The contractor can use the water available at the site for construction purposes and maintaining the plant. However, drinking water has to be arranged by the contractor boring a Tube well of adequate depth and size based on locally available data of the respective department.

## **6. PACKING**

The Contractor shall make separate package for each consignment and mark all containers with the implementing document number pertinent to the shipment. Each shipping container shall also be clearly marked on at least two sides as follows:

- a. Consignee
- b. Contract No.
- c. Package No.
- d. Description
- e. Item No.
- f. Net and gross weight
- g. Volume.

## **7. TRANSPORTATION**

The Contractor shall at its own risk and expense transport all the Materials, Plant and Equipment and the Contractor's Equipment to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances.

Unless otherwise provided in the Contract, the Contractor shall be entitled to select any safe mode of transport operated by any person to carry the Materials, Plant and Equipment and the Contractor's Equipment.

The Contractor shall be responsible for obtaining, if necessary, approvals from the authorities for transportation of the Plant and Equipment and the Contractor's Equipment to the Site. The Owner shall use its best endeavors in a timely and expeditious manner to assist the Contractor in obtaining such approvals, if requested by the Contractor. The Contractor shall indemnify and hold harmless the Owner from and against any claim for damage to roads, bridges or any other traffic facilities that may be caused by the transport of the Plant and Equipment and the Contractor's Equipment to the Site.

### **Issuance & Submission of Way Bill:**

Regarding issuance and submission of e-way bill form, you have to follow the procedure given below:

- a) E-way bill has to be generated from your end as per GST Act, 2017.
- b) A copy of the same is to be sent to the Senior Manager (F&A), Indirect Tax Cell, WBSEDCL, Vidyut Bhavan, 6<sup>th</sup> Floor, 'C' Block, through e- mail id: [manageridtwbsedcl@gmail.com](mailto:manageridtwbsedcl@gmail.com) on the same day of generation of e-way bill.

The utilization report is to be submitted to the Senior Manager (F&A), Indirect Tax Cell, WBSEDCL, Vidyut Bhavan, 6<sup>th</sup> Floor, 'C' Block within 72 hours from generation of e-way bill.

## **8. TOOLS & TACKLES**

The contractor shall provide all reliable tools & tackles for proper execution of work. WBSEDCL, shall in no way, responsible for supply of any tools & tackles for implementation of the work.

## **9. ACCIDENT RISK**

WBSSEDCL shall not be responsible in connection with any sort of accident either fatal or non-fatal which may occur during transportation of materials/equipment, execution/maintenance of works of the PV Power Plant. The Contractor shall have to provide safety precautionary arrangement for his workmen in order to avoid any such incident/accident as per prevalent safety rules and regulations.

## **10. ROAD PERMITS**

In case of procurement of materials for this project outside the state of West Bengal, issuance of Way Bill and Form-C will be taken care by WBSSEDCL as per norms.

## **11. STORAGE AT SITE**

The contractor shall provide all necessary storage at the site in specified areas for all materials which are likely to deteriorate by the action of sun, winds, rain or other natural cause due to exposure in the open in such manner that all such materials shall be duly protected from damage by weather or any other cause.

All such stores shall be cleared after completion of the work and the entire site shall be clean and free from debris. All materials shall be stacked in such a manner as to facilitate rapid and easy checking of such materials.

## **12. REPLACEMENT OF DEFECTIVE PLANT OR MATERIALS**

If during the progress of the work the Purchaser's Representative shall decide and notify in writing to the Contractor that the Contractor has executed any unsound or imperfect work or has supplied any plant inferior in quality to that specified, the contractor, on receiving details of such defects or deficiency shall, at his own expense, within such time as may be reasonably necessary for making it good, proceed to alter, reconstruct or remove such work, or supply fresh materials up to the standard of the specification, and in case the Contractor shall fail so to do, the purchaser may, on giving the Contractor 10 (Ten) days' notice in writing of his intention so to do, proceed to remove the work complained of, and at the cost of the Contractor, perform all such works or supply all such materials, provided that nothing in this clause shall be deemed to deprive the purchaser of or affect any rights under the Contract which he may otherwise have in respect of such defects or deficiencies.

## **13. EQUIPMENT AND MATERIAL**

Equipment and material shall comply with description, rating, type and size as detailed in the technical specification. Equipment and materials furnished shall be complete and operative in all respect.

All accessories which are necessary for safe and satisfactory installation and operation of the equipment shall be furnished in the BOQ.

All parts shall be made accurately to standard gauges so as to facilitate replacement and repair.

All corresponding parts of similar equipment shall be interchangeable.

Contractor shall carefully check the available space and the environmental conditions for installation of all equipment available at site and shall design the system accordingly.

Materials brought to the site shall not be removed from the site without the written consent of the WBSEDCL. The contractor shall submit well in advance for approval of samples, specimens as the WBSEDCL may demand from time to time. Any material brought to the site and rejected by the WBSEDCL shall be removed by the contractor from the site of work immediately.

All materials including reinforcing steel, cement for concrete work, sanitary, plumbing & carpentry fittings etc. shall be procured after approval of brand and make by WBSEDCL.

#### **14. MATERIALS AND WORKMANSHIP**

Qualified, experienced people should be deployed to install the PV Power Plant. All materials shall be of the best quality and capable of satisfactory operation under the operating and prevailing climatic conditions. Unless otherwise specified, they shall conform in all respect to the latest edition of the relevant code and standards. The project must be supervised by a qualified Structural Engineer/Engineering firm and Electrical/ Electronics Engineer so that the work shall be as per drawing and related IS/IEC Code.

The work shall be performed confirming safety precaution of all level of worker execute the project. The name and the qualification of the project engineers must be submitted to WBSEDCL after placement of order. The qualification of the supervising engineers must have degree in respective stream.

#### **15. TESTING AND INSPECTION**

Any authorized representative of WBSEDCL shall, at all times, have full access to all parts of the site, places from which natural materials are being obtained, during production, manufacture and construction and be entitled to examine, inspect, measure and test materials and workmanship, and check the progress of manufacture of plant and production of materials/equipment at manufacturer's workshop. No such activity shall relieve the Contractor from any obligation or responsibility.

Material Inspection will be carried out after submission of all test reports/certificates and after completion of the manufacturing work, against formal intimation from the contractor. The contractor shall give notice of any material being ready for testing to Solar Power Generation Department, WBSEDCL.

The contractor shall arrange for all the necessary tests required for the project in the premises of the contractor or Sub-contractor and provide assistance, labour, materials, electricity, fuel, stores, apparatus and instruments as may be necessary to carry out the tests efficiently without any extra charges. If the facilities are inadequate to carry out tests as per standard, the contractor shall have to arrange suitable testing place having all such required facilities and the cost towards this will be on contractor's account.

The contractor shall also bear all charges towards travelling expenses of the Inspecting Team of the Purchaser or the authorized representatives of the Outside Inspecting agency consisting of at least two (2) persons for to and fro journey by Air from purchaser's Headquarter, including boarding and lodging at the place of inspection and transit, if any for the purpose of Inspection and Testing.

WBSEDCL, if desired, will visit the contractor's premises/manufacturer's workshop and may proceed with the routine tests. Arrangements for such program shall be done by the contractor. The inspection setup and instruments must be provided by the contractor within the contract value.

The material shall have to be dispatched at site after inspection and clearance from the purchaser.

WBSEDCL, if desired, may test the delivered product (especially solar module) at site from any accredited laboratory of Govt. of India. The result of that test and subsequent decisions taken by the controlling officer will be bound to the contractor.

If during inspection at the contractor's or sub-contractor's, the offered material or equipment are not found in entire offered quantity or found in a part quantity or without any identification mark, the offer will be termed as "Fake Offer". The owner in that case shall ask the contractor to deposit a sum of Rs 50,000/- as penal measure. However, the referred material/equipment shall be inspected further on receipt of re- offer as well as deposition of specific amount, as above to the owner by the contractor.

## **16. REJECTION**

If, as a result of an examination/testing, any plant, materials, design or workmanship is found defective and/or not in accordance with the Contract, WBSEDCL may reject the plant, materials, design or workmanship by giving notice with reasons. The Contractor shall then promptly make good the defect and/or ensure that the rejected/replaced item complies with the Contract.

If WBSEDCL requires this plant, materials, design or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause WBSEDCL to incur additional costs, the Contractor shall subject to pay these costs to WBSEDCL.

## **17. ROYALTIES**

The Contractor shall pay all royalties, rents and other payments for: i. Natural Materials obtained from outside the Site and ii. The disposal of material from demolitions and excavations and of other surplus material (natural or man-made), except to the extent that disposal areas within the Site are specified in the Contract.

## **18. SUPPLEMENTARY/EXTRA WORKS**

Whenever supplementary/extra items of work become unavoidable for completion of the work in all respect, the Contractor shall bring the matter to the notice of the Controlling Officer and submit their proposal. However, the controlling officers shall have the right to advise the contractor to proceed with such item (s) of work. Rates for supplementary items shall be arrived at as given hereunder:

- 19.1 The rates of all supplementary items shall be decided on pro-rata basis from the existing items in the contract.
- 19.2 When above clause no 19.1 shall not be applicable the rates shall be taken from P.W.D. (WB) schedule of rates for building works, sanitary & plumbing works effective from 01.07.2014 including addenda and corrigenda published up to date of bid opening subject to plus/minus the contractual rate of quotation.
- 19.3 When clause no 19.1 & 19.2 above shall not be applicable, the rates should be analyzed, to the mutual acceptance from present market rates of different elements involved in the item, against documentary evidence, with 5% overhead, contractor's profit as 10% and 1% cess towards BOCWWC Act,1996. In that case contractual rate of quotation will not be applicable.



Controlling Officer's decision regarding finalization of rate of non-scheduled item(s) shall be final and binding upon the contractors.

#### **19. COMMISSIONING**

After the erection and testing of the equipment/works as per above, commissioning of the plant and works shall be carried out and here the term "Commissioning" shall mean the activities of functional testing of the complete system after erection and testing, including tuning or adjustment of the equipment for optimum performance and demonstrating to the owner that the equipment performance meets the requirements of the specifications.

The contractor needs to submit the time schedule for the site work with their detailed design report considering the above factors.

#### **20. DISPUTES**

The parties shall take necessary steps to settle any dispute through amicable mutual discussion with issuing prior notice in writing to other side at least 15 (Fifteen) days in advance.

#### **21. JURISDICTIONAL MATTER**

If such disputes did not get resolved then either party may approach court of law. All litigation matters between the parties if any shall be held in any Court in Kolkata under the superintendence of High Court Calcutta.

#### **22. ACCOMMODATION**

The accommodation of the contractor's Engineers and workers at the site is to be arranged by the contractor. WBSEDCL may arrange the same upon availability of at the nearest field hostel in chargeable basis after receiving request letter from the contractor.

#### **23. NIGHT AND HOLIDAY WORK**

None of the permanent work related to contract shall be carried out during the night or Sunday or on other holiday of WBSEDCL without permission in writing of the Controlling Officer of WBSEDCL.

#### **24. SURVEILLANCE**

The contractor shall in connection with the works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the WBSEDCL or by any competent authority or statutory or other authority for the protection of the works or for the safety and convenience of the public or others.

#### **25. CLEARING SITE ON COMPLETION**

On completion of the works the contractor shall clear away any and remove from the site all constructional plant, surplus materials, rubbish, debris and temporary works of every kind and leave the whole of the site and works clean and in a good and tidy condition to the satisfaction of the Controlling Officer of WBSEDCL.

The contractor shall dismantle and remove the staging and other temporary structures like stores, offices, labour camps etc. on completion of work, clear and clean the site where such temporary facilities were built and restore the same to original condition.

#### **26. TRAINING FOR WBSEDCL PERSONNEL**

The Contractor shall arrange training program at site for WBSEDCL personnel. The duration of the training program shall be minimum 02 (two) days. The contractor shall provide training materials at least 07 (seven) days before commencement of training program. The training shall be the part of contract and no extra amount shall be provided for organizing the training program.

# **TECHNICAL SPECIFICATION (CIVIL WORKS)**

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All civil works shall conform to the latest Indian standards, codes etc as where applicable or to equivalent applicable international standards approved by the engineer-in-charge. Civil works include but not limited to the following items whichever necessary for implementation of the Solar PV Project. All civil works should be carried out as per the relevant standards and guidelines /WB PWD Schedule of Works.

## **1. CIVIL WORKS**

### **1.1 FOUNDATIONS**

The contractor is responsible for the detailed soil investigation and subsequent foundation design of the structures in the plant. The plinth foundation of the module mounting structures, buildings and other important structures must be approved by WBSEDCL prior to construction. The foundation of the Main Control Room Building shall have the provision of accommodating one floor (extra), in addition to that required, in accommodating the equipment and personnel. The contractor must provide the detailed design calculations of the foundation, including the soft copy of the STAAD output file. The foundations should be designed considering the weight and distribution of the structure and assembly, and a wind speed as per IS: 875 part-III. Seismic factors for the site have to be considered while making the design of the foundation. Successful Bidder shall also plan for transport and storage of materials at site.

# **TECHNICAL SPECIFICATION: (ELECTRICAL)**

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# 1. SOLAR INVERTER

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## 1.1 SCOPE

This section covers the activities related to design, manufacturing, testing at works, supply, insurance, transportation and delivery at project site, storage, erection, testing, commissioning of Solar Inverters as detailed hereunder.

- a. The rated power/name plate capacity of the inverters shall be the AC output of the inverter at 50°C.
- b. The scope of supply shall also include necessary spares, if any, required for normal or any breakdown maintenance for at least 5 (five) years and special tools & plants required for erection & maintenance. Corresponding parts of all the equipment's & spares shall be of the same specification & workmanship and shall be interchangeable.

All the material & workmanship shall be of reputed make as have proven successful in their respective uses in similar services & under similar condition.

The solar inverter/power conditioning unit shall be suitable for interfacing with SCADA system and all necessary transducers shall be included under the scope of supply. Warranty of Solar Inverters shall be 05 years.

## 1.2 STANDARDS

The equipment and materials covered by this specification shall conform to the latest edition of following Indian Standards or equivalent IEC standards except where specified otherwise in this specification:

Sl. No.	Standards	Description
1	IEC: 61683	Photovoltaic systems – Power Conditioners – Procedure for measuring efficiency
3	IEC 60068	Environmental Testing
4	IEC 62116 / IEEE 1547/UL 1741/ equivalent IS standard	Photovoltaic (PV) systems - Characteristics of the utility interface
5	IEC 61727 Relevant CEA/ CERC regulation and grid code (amended up to date)	Utility-interconnected photovoltaic inverters - Test procedure of islanding prevention measures
6	IEC 61000 series	EMC, harmonics, etc.
7	IEC 62109 (1&2), EN 50178 or equivalent Recommended practice for	Electrical safety
8	PV – Utility interconnections	IEEE standard 929 – 2000 or equivalent
9	IEEE 519	Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems Balance-of-system components for photovoltaic systems
10	IEC 62093	Design qualification natural environments
11	CEA Technical Standards for Connectivity to the Grid Regulations 2007 with 2013 Amendment	

Solar Inverters shall have certificate and approval from VDE, IEC, UNE, RD, EDF, BDEW etc. The inverters should have CE conformity according to LVD (Low Voltage Directive) and EMC (Electro Magnetic Compatibility) Directive for safety purpose.

Type test certificate issuing authorities should be any NABL/IEC Accredited Testing Laboratories or MNRE approved test centers.

Equipment meeting with other authoritative standards which ensure an equal or better quality is also acceptable. Where the equipment conforms to any other authoritative standard, the salient points of difference between the standard adopted and IS/IEC shall be clearly brought out by the contractor.

### **1.3 TECHNICAL REQUIREMENTS**

- The inverter should be 3- $\Phi$  static solid state type power conditioning unit.
- Inverter/PCU shall be centralized grid tied in nature; Maximum Power Point Tracker (MPPT) shall be integrated in the power conditioner unit to maximize energy drawn from the Solar PV array. The MPPT should be microprocessor based to minimize power losses. The details of working mechanism of MPPT to be submitted with the detailed design report. The MPPT unit shall conform to IEC 62093 for design qualification.
- The minimum euro efficiency of the PCU as per IEC 61683 shall be 98%. The bidder shall specify the conversion efficiency at following load conditions i.e. 25%, 50%, 75% and 100% during detail engineering, which shall be confirmed by type test reports.
- Degree of protection: Minimum IP65 for Electronic section & minimum IP65 for rest part of Inverter.
- Individual IGBT stacks shall be interchangeable and capable of operating even if one or two stacks out of the three gets damaged.
- Nuts & bolts and the PCU enclosure shall have to be adequately protected taking into consideration the atmosphere and weather prevailing in the area.
- Only those PCUs/ Inverters which are commissioned for the design capacity till date in India shall be considered for this project with individual Inverter capacity to be selected as per site suitability. Contractor has to provide sufficient information to the satisfaction of the plant owner before placing the final order for PCUs/Inverters. Service center of the PCU manufacturer must be in India
- All PCUs shall consist of associated control, protection and data logging devices and remote monitoring hardware and compatible with software used for SMB level monitoring.
- The dimension, weight, foundation details etc. of the PCU shall be clearly indicated in the technical specification to be submitted with the detailed design report.
- The PCU shall be capable of complete automatic operation, including wake-up, synchronization & shut down independently & automatically. Inverters / PCU shall operate in sleeping mode when there will no power connected.
- The Inverter shall have internal protection arrangement against any sustained fault in output line and lightning in the grid. AC protection boxes shall be provided at the inverter output which shall include over current, under voltage protection etc.
- Both AC & DC lines should have suitable fuses & surge arrestors and contactors to allow safe start up and shut down of the system as per the type tested design.

- The inverter output shall always follow the grid in terms of voltage and frequency. This shall be achieved by sensing the grid voltage and phase and feeding this information to the feedback loop of the inverter. Thus control variable then controls the output voltage and frequency of the inverter, so that Inverter is always synchronized with the grid. The inverter shall be self-commutated with Pulse width modulation (PWM) technology.
- The PCU shall be able to withstand an unbalanced load conforming to related IEC standard (+/- 5% voltage). The PCU shall include appropriate self-protective and self-diagnostic features to protect itself and the PV array from damage in the event of PCU component failure or from parameters – beyond the PCU's safe operating range due to internal or external causes. The self-protective features shall not allow signals from the PCU front panel to cause the PCU to be operated in a manner which may be unsafe or damaging. Faults due to malfunctioning within the PCU, including commutation feature, shall be cleared by the PCU protective devices and not by the existing site utility grid service circuit breaker.
- Operation outside the limits of power quality as described in the technical data sheet should cause the power conditioner to disconnect the grid. Additional parameters requiring automatic disconnection are over voltage, over current, earth fault, short circuit and reverse power.
- The inverter itself shall consist of one circuit breaker for isolation from the circuit during any fault or maintenance purpose.
- All three phases shall be supervised with respect to rise/fall in programmable threshold values of frequency.
- The PCU shall be capable of controlling power factor dynamically.
- The inverters shall operate satisfactorily within the operating ambient temperature range of -15°C to +60°C. The contractor shall assure that the inverter shall not de-rate up to +50°C ambient temperature.
- To take care of PID (Potential Induced Degradation), the inverter shall have active negative grounding kit. [Only PID free Solar PV modules shall be used for the proposed plant and necessary test certificates shall be submitted.
- The PCU shall have the following main features for convenience of operation:
  - Auto 'Wake up': The system shall automatically "wake up" in the morning and begin to export power provided there is sufficient solar energy and the grid voltage and frequency is in range.
  - Stand – By Mode: The control system shall continuously monitor the output of the solar power Plant until pre-set value is exceeded & that value to be indicated.
  - Sleep Mode: Automatic sleep mode shall be provided so that unnecessary losses are minimized at night. The power conditioner must also automatically re-enter standby mode when threshold of standby mode reached.
  - Basic System Operation (Full Auto Mode): The control system shall continuously monitor the output of the solar power Plant until pre-set value is exceeded & that value to be indicated.
- Following protections shall be provided with the inverter.
  - Over voltage both at input & output
  - Over current both at input & output
  - Over/under grid frequency
  - Synchronization loss
  - Anti-islanding Protection (IEEE 1547/UL 1741/ equivalent BIS standard)
  - Heat sink over temperature
  - Short circuit
  - Protection against lightening
  - Protection against unbalance phase voltage
  - Power regulation in the event of thermal overloading

- Protection for each solid-state electronic device
- Surge arrestors to protect against Surge voltage induced at output due to external source
- Direct earth fault protection and body earthing
- Set point pre-selection for VAR control
- Insulation monitoring of the PV array with sequential fault location
- Any other protections required
- Inverters should have user friendly LED/LCD or touch display for programming and view on line parameters such as:
  - Inverter per phase Voltage, current, kW, kVA, frequency and power factor
  - Grid Voltage, frequency and power factor
  - DC voltage and current
  - Inverter Import export kWh summation
  - Solar kWh summation
  - Inverter ON/OFF
  - Grid ON/OFF
  - Inverter under voltage/over voltage
  - Inverter over load
  - Inverter over temperature
  - Any other if required

#### 1.4 SPECIFICATION

Sl. No.	Operating Parameter	Desired specification
1	Input (DC)	
	PV array connectivity capacity	1MW
	Maximum System Voltage	1000V
	Number of MPPT Channel	As per design of the manufacturer.
2	Output (AC)	
	Nominal AC Power output	400V,1.25MW
	Number of Grid Phase	3
	Adjustable AC voltage range	+/- 10%
	Frequency range	+/- 5%
	AC wave form	Sine wave
	THD	Less than 3% at 100% load
	Switching	H.F. transformer/transformer less
3	General Electrical data	
	European Efficiency	98 % (minimum)
	No load loss	< 1% of rated power
	Maximum loss in sleep mode	< 0.05% of rated power
4	Protection	
	DC Side	As per Technical Requirement
	AC side	As per Technical Requirement
	Isolation Switch	PV array Isolation switch (DC)
	Protection Degree	IP 54



SI. No.	Operating Parameter	Desired specification
	Ground fault detection device (RCD)	To be provided
5	Display	
	Display type	LED/LCD or touch display
	Display parameter	
	DC	As per Technical Requirement
	On grid connected mode	As per Technical Requirement
9	Interface (Communication protocol)	Suitable port must be provided in the inverter for i. On site upgrade of Software ii. On site dumping data from the memory iii. Plant based remote monitoring system
10	Storage of Data	At least for 1 year. Separate data logger may be provided to meet the criteria.
11	Monitoring	Matched with the monitoring and data logging system (SCADA)
12	Mechanical Data	
	Protection Class	As mentioned in the Technical Requirement
	DC Switch	Integrated
	Operating ambient temperature	-15° C to +60° C
	Relative Humidity	15 to 95 %
	Noise Emission	Less than 80 dB (A) @ 1 meter
	Cooling	Forced cooling

## 1.5 APPROVAL

The Detailed Design Report Submitted by the contractor to WBSEDCL must contain but not limited to the following details of the Solar Inverter/Power conditioning Unit:

- Detailed technical description of the complete unit including necessary design calculations.
- Necessary Schematic & Other Drawings.
- Type Test Reports, Performance certificate from plant owner etc.

Joint inspections and testing will be done by WBSEDCL and the authorized representatives of the contractor at the manufacturer's workshop on regular basis for quality assurance and testing. Acceptance Tests as per relevant Standard shall be carried out at the module manufacturer's workshop. Following tests shall be carried out on certain number of Inverters from a lot (decided by WBSEDCL) as acceptance tests of Solar Inverters:

- Visual Inspection
- Performance Test and measurement of AC & DC parameters

- DC reverse polarity protection
- Islanding Protection
- Over Voltage & Under Voltage withstand
- Over Frequency & Under Frequency withstand
- Night consumption
- Loss of Air Flow/ Rise of Temperature alarm due to cooling fan failure.
- Inverter Tripping response to cooling fan failure.
- Any other test as desired by WBSEDCL

Arrangements for the aforesaid testing and inspection at manufacturer's end are to be provided by the contractor.

Prior to the delivery of the product, the contractor shall submit but not limited to the following documents:

- Guarantees
- Instructions for installation and operation, manual
- Safety precautions
- Test reports for routine tests and acceptance tests etc.

The contractor can deliver the product to the site only after receiving such approval against their prayer in writing from WBSEDCL.

## 2. EARTHING SYSTEM

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### 2.1 SCOPE

The scope of work under this specification covers the design, supply, transportation, delivery at project site, transit insurance, storage at site, erection, testing & commissioning of earthing system along with necessary materials

### 2.2 STANDARDS

The grounding system shall conform to the requirement of following standards.

Sl. No.	Standards	Description
1	ANSI/IEEE: 80 –2000	Guide for safety in AC Substation Grounding
2	CBIP Publication: 223	Design of Earthing Mat for High Voltage substation
3	IS: 3043	Code of Practice for Earthing Indian Electricity Rules

### 2.3 OBJECTIVE

The grounding system shall be designed with the following objectives:

- To provide low impedance path to fault currents, during ground faults, to ensure prompt and consistent operation of protective devices to effect isolation
- To keep the maximum voltage gradient during ground faults along the surface inside and around the switchyard, PV array yard, control rooms etc. within safe limits
- To protect the life and property from electrical shocks due to over voltage
- To stabilize circuit potentials with respect to ground and limit the overall potential rise

### 2.4 TECHNICAL REQUIREMENTS

Minimum technical requirement of the earthing system is mentioned below.

- The earth resistance should be less than 1  $\Omega$ .
- Suitable number of earthing pit shall be provided at the array field.
- Design and installation of the earth mat and other associated system shall confirm to IS: 3043 and IEEE Std P80 with latest amendments.
- The earthing for solar field and power distribution system shall be made with GI pipe of suitable size including accessories, and providing masonry enclosure with cast iron cover plate having locking arrangement, watering pipe using charcoal or coke and salt as required as per provisions of IS: 3043. The Mounting structure shall be grounded properly using GI strips and maintenance free earthing kit.
- Necessary provision shall be made for bolted isolating joints of each earthing pit for periodic checking of earth resistance.
- The earth conduction shall run through GI pipe partly buried and partly on the surface of the control room building.
- The complete earthing system shall be mechanically & electrically connected to provide independent return to earth.
- All three-phase equipment shall have two distinct earth connections.
- Along the cable trays suitable size of GI Flat shall be provided inside the control room.

- For each earth pit, necessary Test Point shall have to be provided.
- The earthing system shall be connected to the following.
  - Solar modules with suitable number of earthing pit at the solar array field
  - The neutral point of each system/equipment
  - Equipment framework and other non-current carrying parts
  - Frames of panels & cubicles
  - Metallic structures of switchgear, cable racks, casing of cable boxes
  - Equipment supporting Steel structures
  - All extraneous metallic frame work not associated with equipment
  - The earth point of lightning arrestors; voltage transformers and lightning conductors through their permanent independent earth electrodes.
  - Fence
- For equipment connection to mat/riser, 50 mm x 6 mm or higher size GS flat shall be used.
- The conductor shall be of adequate cross-section to safely withstand the system fault current for time duration of fault clearance by the remotest/back up protective system.
- Sufficient allowance needs to be provided for corrosion of the embedded conductor on account of chemical properties of soil and also due to galvanic action with other embedded systems.
- For determination of the size of the conductor, the minimum value of earth fault current shall be taken as 25 kA, duration of fault current shall be considered as 3 second. The extra allowance of minimum 20% to take care of corrosion shall be added to arrive at final conductor size.
- For designing of the earth mat for 33kV switchyard, the material of ground mat conductor shall be MS Flat and that of risers emanating from ground mat shall be GS flats. Soil resistance of the site is available in the soil report.
- Lightning shield wire design of switch yard shall be done using rail pole.

## 2.5 APPROVAL

The successful bidder shall carry out the earth resistance measurement at the site and they need to submit the measurement report to WBSEDCL.

The Detailed Design Report submitted by the contractor to WBSEDCL must contain but not limited to the following details of the earthing system:

- Detailed specification of all the items.
- Soil resistivity measurement data
- Necessary calculations and drawings etc.

The successful bidder required to produce schematic diagram of the earthing system and the proposed locations for earth mat as per relevant standard with the Detailed Design Report.

All drawings and calculations submitted by the contractor will be subjected to approval of the WBSEDCL.

### **NOTE:**

***Any item/equipment not mentioned in the Technical Specification, but required for successful completion of the project shall be deemed to be a part of the scope of the work and the same shall be included by the bidder in their Bill of Quantity (BOQ).***

## **PRO-FORMA**

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## Form – I

### CHECK LIST

Sl. No.	Scanned Copy of Documents to be uploaded	Name of folder	To be submitted in cover	Submitted (Y/N)
1	Check List (Form – I)	Forms	Statutory cover (Technical proposal)	
2	Application for Tender (Proforma – 1)	Annexure	Statutory cover (Technical proposal)	
3	Power of Attorney i.r.o. the person authorised to sign	Company Details	Non-Statutory cover (Technical proposal)	
4	Bidder's general information (Form – II)	Company Details	Statutory cover (Technical proposal)	
5	Earnest Money Deposit (Scanned copy)/Bank Guarantee for EMD (Proforma-3)	Drafts	Statutory cover (Technical proposal)	
6	Confirmation for No Deviation Sheet (Proforma – 2)	Annexure	Statutory cover (Technical proposal)	
7	Tender Document with Stamp & Signature by authorised person.	NIT	Statutory cover (Technical proposal)	
8	Addenda / corrigenda & Pre-Bid response/minutes , if published	NIT	Statutory cover (Technical proposal)	
9	Format of Letter of Bid (Form – III)	Forms	Statutory cover (Technical proposal)	
10	Pro-forma for undertaking to be submitted by the Bidders (Form – IV)	Forms	Statutory cover (Technical proposal)	
11	Statement of orders executed (Form – VI)	Forms	Statutory cover (Technical proposal)	
12	<p><b><u>Technical Credential :</u></b></p> <p>i) Order(s)/Contract Agreement(s) issued by the purchaser as per Clause no. 7.2 of ITB</p> <p>ii) Commissioning Report (s) and Completion Certificate(s) as per Clause no. 7.2 of ITB</p> <p>iii) Satisfactory operation of Solar PV Plant or Solar project related works or any electrical works under SNA/Govt./SECI/PSU Power Utility / Statutory body / Sub-vendor of any Govt. Solar Projects (Proforma-5)</p> <p>Substantiate timely completion of the work and Satisfactory operation of Solar PV Plant in support of minimum eligibility criteria as per Clause no. 7.2 of ITB</p>	Credential	Non-Statutory cover (Technical proposal)	

<b>Sl. No.</b>	<b>Scanned Copy of Documents to be uploaded</b>	<b>Name of folder</b>	<b>To be submitted in cover</b>	<b>Submitted (Y/N)</b>
13	Bill of Material (Vide Proforma – 6)	Declaration	Non-Statutory cover (Technical proposal)	
14	List of Orders in hand with financial information	Declaration	Non-Statutory cover (Technical proposal)	
15	List of key personnel available and proposed to be engaged for the project mentioning their experience and qualification	Declaration	Non-Statutory cover (Technical proposal)	
16	Proof of Company Incorporation / Trade Licence	Company Details	Non-Statutory cover (Technical proposal)	
17	Electrical Contractor License	Certificates	Non-Statutory cover (Technical proposal)	
18	Labour License	Certificates	Non-Statutory cover (Technical proposal)	
19	PF registration certificate	Certificates	Non-Statutory cover (Technical proposal)	
20	ESI Certificate	Certificates	Non-Statutory cover (Technical proposal)	
21	PAN Card details	Certificates	Non-Statutory cover (Technical proposal)	
22	GST registration certificate	Certificates	Non-Statutory cover (Technical proposal)	
23	Professional Tax Registration certificate	Certificates	Non-Statutory cover (Technical proposal)	
24	Income Tax return for the last 03 (three) Assessment Years	Financial Information	Non-Statutory cover (Technical proposal)	
25	Summary statement of average annual turnover (Form – V)	Forms	Statutory cover (Technical proposal)	
26	Evidence of Access to or Availability of Credit/Facilities (Proforma – 4)	Financial Information	Non-Statutory cover (Technical proposal)	
27	Audited Report on Annual Accounts for last three Years.	Financial Information	Non-Statutory cover (Technical proposal)	
28	Order(s)/Contract Agreement(s) issued by the purchaser in support of financial eligibility criteria as per clause No.7.3 of ITB	Financial Information	Non-Statutory cover (Technical proposal)	
29	Project Proposal with Time Schedule	Declaration	Non-Statutory cover (Technical proposal)	
30	Any other documents, if found necessary	Declaration	Non-Statutory cover (Technical proposal)	

**Form-II****BIDDER'S GENERAL INFORMATION****(To be submitted on the Letter Head of the Bidding Company)**

<b>Sr. No.</b>	<b>Description</b>	<b>Remarks</b>
1	Name of the Bidder <i>(Incase of JV/ Consortium, name of all the members to be indicated and lead member to be identified)</i>	
2	Status of the Firm	
3	Mailing Address of Registered Office	
4	Mailing Address of Operation Office	
5	E-mail	
6	Web site	
7	Authorized Contact Person(s) with Name, Designation, Address and Mobile Phone No., E- mail address / Fax No. to whom all references shall be made	
8	Year of Incorporation	
9	Number of Years in Operation	
10	ISO Certification Yes/No	
11	Name of the Banker	
12	Branch Details of Bank	
13	Type of Account with Account Number	
14	IFSC Code	
15	Permanent Account Number (PAN) of the Bidder	<i>(Copy of PAN Card to be enclosed)</i>
16	GST ID	<i>(Copy of GST Regd. Card to be enclosed)</i>
17	PF Registration Number with Details	<i>(Copy of PF Registration to be enclosed)</i>
20	ESI Registration Number with Details	<i>(Copy of ESI Registration to be enclosed)</i>
21	Have the Bidder/ Company ever been debarred by any Govt. Dept./ Undertaking for undertaking any work	Yes/No <i>(If answer is YES, please providing details)</i>
22	Reference of any document information attached by the Bidder other than specified in the tender.	
23	Whether the Bidder wishes to form a Project Company for execution of work	Yes/No
24	Bidding company is listed in India	Yes/No
25	Whether company is MSME as on the bidding date	Yes/No

(Signature of Authorized Signatory)  
With Stamp



### Form – III

#### FORMAT OF LETTER OF BID

LETTER HEAD OF BIDDER (AS ENROLLED ONLINE ON e-Tendering PORTAL OF NIC)

To,

The Chief Engineer,

-----

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-----

Sub: Letter of Bid for the work\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Ref: 1. NIeT No\_\_\_\_\_dated\_\_\_\_\_

2. Tender Id No. \_\_\_\_\_

Dear Sir,

We offer to execute the whole work in Turnkey Basis in accordance with the conditions of the NIT document as available in the website. The details of the EMD being submitted by us has been furnished on-line.

This Bid and your subsequent Letter of Acceptance / Work Order shall constitute a binding contract between us.

We hereby confirm our acceptance of all terms and conditions of the NIT document unconditionally.

Dated-----

**SIGNATURE OF THE TENDERER WITH SEAL**

## Form - IV

### PROFORMA FOR UNDERTAKING TO BE SUBMITTED BY THE BIDDER

(To be executed on non-Judicial stamp paper of requisite value)

(For genuineness of the information furnished on-line and authenticity of the documents produced before Tender Committee for verification in support of his eligibility)

I \_\_\_\_\_, Partner/Legal Attorney/  
Accredited Representative of M/s \_\_\_\_\_,  
solemnly declare that:

1. We are submitting Tender for the Work \_\_\_\_\_  
\_\_\_\_\_ against Tender  
NleT. No. \_\_\_\_\_
2. None of the Partners of our firm is relative of employee of West Bengal State Electricity Distribution Company Limited (WBSEDCL).
3. All information furnished by us in respect of fulfilment of eligibility criteria and qualification information of this Tender is complete, correct and true.
4. All documents/ credentials submitted along with this Tender are genuine, authentic, true and valid.
5. If any information and document submitted is found to be false/ incorrect any time, department may cancel my Tender and action as deemed fit may be taken against us, including termination of the contract, forfeiture of all dues including Earnest Money and banning / delisting of our firm and all partners of the firm etc.
6. Should this Bid be accepted, I/We\* also agree to abide by and fulfil all the terms and conditions of provisions of the above mentioned Bidding Documents.

Signature along with Seal of Company.....

(Duly authorized to sign the Tender on behalf of the Contractors)

Name.....

Designation.....

Name of Company.....

(IN BLOCK LETTERS)

#### WITNESS

Signature.....

Date.....

Name & Address.....

.....

.....

.....

.....

Telephone No.....

Fax No.....

E-mail.....

**\*Strike out whichever is not applicable**

**Form – V****CERTIFICATE REGARDING SUMMARY STATEMENT OF YEARLY TURNOVER****FORMAT OF CHARTERED ACCOUNTANT CERTIFICATE FOR  
FINANCIAL CAPABILITY OF THE BIDDER****(To be submitted on the Letter Head of the Chartered Accountant)**

Ref.No. \_\_\_\_\_ Date: \_\_\_\_\_

To,  
The Chief Engineer,  
Solar Power Generation Department (SPGD)  
3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town,  
Kolkata – 700163

Sub: Bid for “Procurement, Supply, Installation, Testing and commissioning including warranty obligation of one no. 1.25 MW Solar Inverter at Chharrah 10MW (AC) Solar PV Power Plant in Block Purulia, Dist. Purulia, West Bengal.

Dear Sir / Madam,

We have verified the Annual Accounts and other relevant records of M/s.....  
(Name of the bidder) and certify the following.

Further, we certify that the Financially Evaluated Entity (ies) had an Annual Turnover

**A. ANNUAL TURNOVER OF LAST 3 YEARS:**

<b>FY</b>	<b>Amount (Currency)</b>
Year 1:	
Year 2:	
Year 3:	

**And**

Net worth (strike out whichever is not applicable) of INR Crore computed as per instructions provided in this tender based on unconsolidated audited annual accounts as per last FY.

**B. FINANCIAL DATA FOR LAST AUDITED FINANCIAL YEAR:**

<b>Description</b>	<b>Year</b>
	<b>Amount (Currency)</b>
1. Current Assets	
2. Current Liabilities	
3. Working Capital (Current Assets- Current liabilities)	
4. Net Worth (As mentioned under Annexure to BDS)	

Yours faithfully

(Signature and stamp

(on each page) of Authorized Signatory of Bidding Company.

Name: .....

Date: .....

Place: .....

Signature and stamp (on each page) of Chartered Accountant/Statutory Auditors  
of Bidding Company.

Name: .....

Date: .....

Place: .....

**Notes:**

Audited consolidated annual accounts of the Bidder may also be used for the purpose of financial criteria provided the Bidder has at least 50% equity in each company whose accounts are merged in the audited consolidated accounts and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered again for the purpose of evaluation of the Bid.

## Form – VI

### STATEMENT OF SIMILAR TYPE OF ORDERS EXECUTED DURING LAST FIVE YEARS

Sl. No.	Name of the Installed Plants/ Project	Financial year	Order No. and date	Name of Owner/ order issuing authority	Plant Capacity (MW)	Ordered value (Rs.)	Completion Time	Completion Certificate	Performance Report	Grid Synchronization Certificate & Generation Data

Remarks, if any :

.....  
**SIGNATURE OF THE TENDERER WITH OFFICE SEAL**

## Proforma: 1

### APPLICATION FOR TENDER

(To be submitted on official letter head by the bidder)

Ref. No. ....

Dated: .....

To

The Chief Engineer,

Solar Power Generation Department (SPGD)

3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town,

Kolkata – 700163

NIT No: - SPGD/WBSEDCL/

Dear Sir,

Having examined the Statutory, Non-statutory of NIT and Tender documents, I/we hereby like to state that I/we wilfully accept all your conditions and offer to take up the work as per NIT. No. stated above. I/We also agree to guarantee to replace or repair any defect, whenever it is detected, in the equipment/materials to the satisfaction of the owner in conformity with the conditions of contract, specifications, drawings, bill of quantities and addenda.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 201\_\_\_\_

Full name of applicant: \_\_\_\_\_

Signature: \_\_\_\_\_

In the capacity of: \_\_\_\_\_

Duly authorized to sign bids

For & on behalf of (Name of Firm): \_\_\_\_\_

(In block capitals or typed)

Office address:

Telephone no(s) (office): \_\_\_\_\_

Mobile No: \_\_\_\_\_

Fax No: \_\_\_\_\_

E mail ID: \_\_\_\_\_

.....  
**SIGNATURE OF THE TENDERER WITH OFFICE SEAL**

## Proforma-2

SPECIMEN COPY

### NO DEVIATION CONFIRMATION

(To be submitted on the Letter Head of the Bidding Company)

Ref.No. \_\_\_\_\_ Date: \_

From: *(Insert name and address of Bidding Company)*

\_\_\_\_\_  
\_\_\_\_\_

Tel.#:

Fax#:

E-mail address#

To,

The Chief Engineer,

Solar Power Generation Department (SPGD)

3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town,

Kolkata –700 163

Sub: Procurement, Supply, Installation, Testing and commissioning including warranty obligation of one no. 1.25 MW Solar Inverter at Chharrah 10MW (AC) Solar PV Power Plant in Block Purulia, Dist. Purulia, West Bengal. ”.

Dear Sir / Madam,

We understand that any 'deviation/ exception' in any form may result in rejection of bid. We, therefore, certify that we have not taken any 'exception/ deviation' anywhere in the bid and we agree that if any 'deviation/ exception' is mentioned or noticed, our bid may be rejected.

Place: [Signature of Authorized Signatory of Bidder]

Date: Name:

Designation:

Seal:

### Proforma: 3

#### BANK GUARANTEE FOR EARNEST MONEY DEPOSIT/BID SECURITY

(The non-Judicial stamp paper of Rs 100/- should be in the name of issuing bank)

Ref.....

Bank Guarantee No.....

Date.....

To

The .....

.....

.....

West Bengal

Dear Sirs,

In accordance with Invitation to bid under your Bid No.....  
M/s....., having its Registered/Head  
Office at..... (Hereinafter called the  
'Bidder') wish to participate in the said Bid  
of.....and you, as a special favour have  
agreed to accept an irrevocable and unconditional Bank Guarantee for an amount  
of..... (..... in  
words.....) Valid  
upto.....on behalf of Bidder in lieu of the Bid deposit  
required to be made by the bidder, as a Condition precedent for participation in the  
said Bid.

We, the.....Bank (Name)  
at.....(Address) having our Head Office  
at..... Guarantee  
and undertake to pay immediately on demand by West Bengal State Electricity  
Distribution Company Ltd., the Amount  
of.....(..... In  
words.....)Without any reservation, protest, demur and  
recourse. Any such demand made by said 'Owner' shall be conclusive and binding  
on us irrespective of any dispute or difference raised by the Bidder.

This Guarantee shall be irrevocable and shall remain valid upto 06(six) calendar  
months with a claim period of 3(three) months from the date of opening of  
Technical Bid.

If any further extension of this guarantee is required, the same shall be extended to  
such required period (not exceeding one year) on receiving instruction from  
M/s.....on whose behalf this guarantee is issued.



In witness where of the Bank, through its authorized office, has set its hand and stamp on this.....day of.....20.....at.....

WITNESS

.....  
(Signature)

.....  
(Signature)

.....  
(Name)

.....  
(Name)

.....  
(Official Address)

.....  
(Official Address)

## Proforma: 4

### EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT/ FACILITIES

(To be given by banker of bidder)

#### BANK CERTIFICATE

This is to certify that M/s .....  
(FULL NAME AND ADDRESS) who are submitting their Bid to  
.....against their tender specification vide Ref.  
No..... and date..... is our customer for the past  
..... years.

Their financial transactions with our bank have been satisfactory. They enjoy the following fund based and non fund based limits including guarantees, L/C and other credit facilities with us against which the extent of utilization as on date is also indicated below:

Sl. No.	TYPE OF FACILITY	SANCTIONED LIMIT AS ON DATE	UTILIZATION AS ON DATE.....

This letter is issued at the request of M/s.....

Sd/-

Name of Bank .....

Name of authorized Signatory .....

Designation .....

Phone No .....

Address .....

SEAL OF THE BANK

## **Proforma: 5**

### **SATISFACTORY OPERATION OF SOLAR PV PLANT OR SOLAR PROJECT RELATED WORKS OR ANY ELECTRICAL WORKS**

(On Plant Owner's Letter Head)

Date: \_\_/\_\_/\_\_\_\_

#### **TO WHOMSOEVER IT MAY CONCERN**

This is to certify that the (plant detail and location) was commissioned on (Date of commissioning) by (Bidder Details) against the LOI/ WO No. (Details of LOI/ WO with complete scope).

The project is under operation since the date of commissioning and has been working satisfactorily as per the estimated output.

Regards,

Signature & SEAL of Authorized Person

**Proforma: 6**  
**BILL OF MATERIALS (BOM)**

(To be completed & submitted with the Bid)

**Name of the Work:** Procurement, Supply, Installation, Testing and commissioning including warranty obligation of one no. 1.25 MW Solar Inverter at Chharrah 10MW (AC) Solar PV Power Plant in Block Purulia, Dist. Purulia, West Bengal.

Sl No	Material Description	Qty	UOM	Description / Specification proposed
1	Supply of Solar Inverter HITACHI/FIMER or REPUTED make 1250KW at 50°C of 400 V AC, 1000 V DC system with 5 years warranty for replacement of existing damaged one (as per technical specification)	1	No	

**Proforma: 07****BANK GUARANTEE FOR CONTRACT PERFORMANCE**

(To be executed in non-judicial stamp paper of Rs. 100/-)

**Ref.**.....**Bank Guarantee No.**..... **Date**...

To  
 The Chief Engineer,  
 Solar Power Generation Department (SPGD)  
 3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town,  
 Kolkata – 700163

West Bengal

Dear Sirs,

In consideration of West Bengal State Electricity Distribution Company Ltd., (herein after referred to as the “Owner” which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to M/s..... with registered/Head office at..... (Hereinafter referred to as “Contractor” which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors and assigns), a Contract issued by Owner’s Letter of Award No..... dated ..... for..... (scope of work) and the same having been acknowledged by the Contractor, resulting in a Contract bearing No..... dated ..... Contractor having agreed to provide a Contract Performance Guarantee for the faithful performance of the entire Contract including net minimum guaranteed generation equivalent to Rs..... (.....in words.....) being (10%) (Ten percent) of the total contract value (aggregating first, second and third contract values) to the Owner.

**We**..... (Name & Address) having its Head Office at..... (hereinafter referred to as the “Bank”, which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Owner, on demand any or all monies payable by the Contractor to the extent of Rs..... (.....in words.....) as aforesaid at any time up to.....\* (day/month/year) without any demur, reservation, contest, recourse or protest and/or without any reference to this Contractor.

Any such demand made by the Owner on the bank shall be conclusive and binding notwithstanding any difference between the Owner and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Owner and further agrees that the guarantee herein contained shall continue to be enforceable till the Owner discharges this guarantee.

The Owner shall have the fullest liberty without affecting in any way the liability of the Bank under the guarantee from time to time to extend the time for performance or the Contract by the Contractor. The Owner shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner and either to enforce or to forbear to enforce any covenants, contained or implied in the Contract between the Owner and the Contractor or any other course or remedy or security available to the Owner. The Bank shall not be relieved of its obligations under these presents by any exercise by the Owner of its liberty with reference to the matters aforesaid or any of them or by reason of any other act of omission or commission on the part of the Owner or any other indulgences shown by the Owner or by any other matter or thing whatsoever which under law would, but for this provision have the effect of relieving the Bank.

The bank also agrees that the Owner at its option shall be entitled to enforce this guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the Owner may have in relation to the Contractor's liabilities.

Notwithstanding anything contained herein above our liability under this guarantee is restricted to Rs.....  
(.....in words.....) and it shall remain in force upto and including .....\*\*(day/month/year) and shall be extended from time to time for such period as may be desired M/s.....on whose behalf this guarantee has been given.

Unless a demand or claim is lodged on us within and including.....\*(day/month/year) we shall be discharged from all liabilities thereafter.

Dated this.....day of.....20.....at.....

WITNESS

.....  
(Signature)

.....  
(Signature)

.....  
(Name)  
(Official Address)

.....  
(Name)  
(Official Address)

Attorney as per Power

Of Attorney No.....

Date.....

**\* Till 3 (three) months after the validity of the Bank Guarantee.**

**\*\* Up to 3 (three) months after the expiry of warranty/guarantee period.**

Notes:

1. The stamp paper of appropriate value shall be purchased in the name of issuing bank.
2. The sum shall be 10% (ten percent) of the total contract value (aggregating first, second and third contract values).

The performance Bank Guarantee/ Contract Performance Bank Guarantee shall be valid as per terms of contract. A period of three (3) months should be added as claimed period from the last date of validity of the Bank Guarantee.

**Proforma: 08****CONTRACT AGREEMENT**

(To be executed on Non-Judicial Stamp Paper of Rs. 100/-)

Articles of agreement made on this..... day of ..... in the year ..... between West Bengal State Electricity Distribution Company Limited (A Government of West Bengal Enterprise) having its head office at Vidyut Bhavan, Block-DJ, Sector-II, Kolkata-700091 hereinafter referred as 'WBSEDCL' (which expression shall unless excluded by or repugnant to the context be deemed to include its successors and assigns) of the ONE PART,

AND

.....Hereinafter referred to as the 'CONTRACTOR' (Which expression shall unless excluded by or repugnant to the context be deemed to include his heirs, executors, administrators, representatives and assigns) of the OTHER PART.

WHEREAS the WBSEDCL invited tenders vide Tender Notice No .....dated..... (Annexed hereto) for Design & engineering, manufacturing & procurement, supply, installation, testing and commissioning including warrantee obligation with 5 (five) year's comprehensive operation and maintenance of..... (Project name)

AND WHEREAS in pursuance of such invitation for tenders, the contractor submitted a tender vide no .....dated..... (Annexed hereto). The Techno-commercial part of which was opened on.....And the Price bid was opened on.....(The tender offer is in custody of the Company at present).

AND WHEREAS AFTER consideration of the tender submitted by the contractor with clarification(s), if any, the WBSEDCL accepted the said tender submitted by the contractor and placed Letter of Award no .....dated..... (Annexed hereto).

NOW, THEREFORE, the WBSEDCL and the contractor agree as follows:

1. The Contractor agrees to undertake the work of "....." as per Letter of Award no .....dated.....referred to above.
2. The WBSEDCL agrees to pay the Contractor as per order no .....dated.....referred to above.



3. Both the Contractor and the Company agree that for the purpose of jurisdiction of court in regard to any dispute arising out of this agreement, this agreement shall be deemed to have been executed within the jurisdiction of the original side of the High Court, Kolkata.

IN WITNESS WHEREOF the parties have hereunder affixed their signature on the day, month and year written as above.

SIGNED, SEALED AND DELIVERED

-----  
Contractor

1).-----  
Witness

2).-----  
Witness

-----  
WBSEDCL

1).-----  
Witness

2).-----  
Witness

**Proforma: 09****INDEMNITY BOND**

(To be executed on Non-Judicial Stamp Paper of Rs. 100/-)

BY THE PRESENT INDEMNITY BOND EXECUTED by us on this .....Day of .....20....., We having Registered Office at ..... (herein after called "OBLIGOR/OBLIGORS" which expression shall mean and includes my/our successors legal representatives, assigns) do hereby binds ourselves and also our entity.....after having the power to bind so with the promise and undertaking in favour of the West Bengal State Electricity Distribution Company Limited, a company incorporated under Companies Act 1956 having Registered Office at Vidyut Bhavan, Block-DJ, Sector-II, Salt Lake City, Kolkata-700091 (hereinafter called as OBLIGEE, which expression shall mean and include it's legal representative, administrators assigns.

WHEREAS OBLIGOR/OBLIGORS has/have been awarded the project under letter no..... dated ..... issued by the OBLIGEE after having observing necessary formalities, the details of which is described in the schedule given here under as per letter mentioned herein-above.

AND WHEREAS according to the condition of the contract the OBLIGOR/OBLIGORS are under obligation to execute this Indemnity Bond before the commencement of actual execution and OBLIGOR/OBLIGORS is/are aware that unless this Indemnity Bond is executed in accordance with the condition of contract before the actual execution in accordance with law the OBLIGEE shall have the power to deem that actual work has been stated within the meaning of the contract before the execution of this Indemnity Bond.

Now this indenture witnesses that We the OBLIGOR/OBLIGORS do hereby undertake:

1. THAT the OBLIGEE shall not be held responsible for any type of accident which may take place during the course of work undertaken by the OBLIGOR/OBLIGORS.
2. THAT the OBLIGOR/OBLIGORS will take/adopt all safety norms in respect of each and every workmen labour personnel according to the rules and laws relating to welfare of workers to the satisfaction of the OBLIGEE IN ALL CASES.
3. That the OBLIGOR/OBLIGORS undertakes/undertake to engage only those labour worker or any other personnel whether skilled or unskilled or any other person whether in technical management or non-managerial or any other capacity in the area covered under Employee' State Insurance Act, 1948 who has/have insurance coverage within the meaning of Employees' State Insurance Act and further undertakes NOT to engage any person in the area covered under Employees State Insurance Act., who does/do not has/have insurance coverage within the meaning of Employees' State Insurance Act,1948.
4. THAT the OBLIGOR/OBLIGORS undertakes/undertake to indemnify and keep harmless the OBLIGEE from all claims, action, proceedings and of risk, damage,

danger to any person whether belonging to/or not belonging to OBLIGOR/OBLIGORS.

5. THAT the OBLIGOR/OBLIGORS shall keep harmless the OBLIGEE from all claims, compensation, damages, any proceedings in respect of any of its employee/workmen under the Employee Compensation Act or any other laws for the time being in force.
6. THAT in case of Joint Venture OBLIGOR/ OBLIGORS shall undertake to Indemnify OBLIGEE from all losses or damages that OBLIGEE may sustain due to dispute/disputes that may arise between the Constituents of the JV.
7. THAT the OBLIGOR/OBLIGORS is/are aware and accept that for the persistent or repeated violation of any condition mentioned in this Indemnity Bond, the OBLIGEE shall have right to terminate the contract of work issued by the OBLIGEE to OBLIGOR/OBLIGORS as per relevant provisions of the Tender Document.

SIGNED AND DELIVERED

BY THE OBLIGOR/OBLIGORS .....

Signature .....

WITNESS:

1) Name & Designation .....

Signature .....

2) Name & Designation .....

Signature .....

**Proforma: 10**  
**EXTENSION OF BANK GUARANTEE**

Ref.....

Date.....

To  
 The Chief Engineer,  
 Solar Power Generation Department (SPGD)  
 3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town,  
 Kolkata – 700163

West Bengal

**Sub:** Extension of Bank Guarantee No.....for  
 Rs..... favoring yourselves, expiring on..... on  
 account of M/s.....in respect of  
 Contract No.....dated ..... (Hereinafter  
 called original Bank Guarantee).

Dear Sirs,

At the request of M/s.....,  
 we.....Bank, branch office at.....and  
 having its Head Office at.....do hereby extend our  
 liability under the above mentioned Bank Guarantee No.....  
 dated..... for a further period of.....(Years/Months)  
 from.....to expire on..... Expect as provided above, all  
 other terms and conditions of the original bank guarantee  
 No.....dated.....shall remain unaltered and binding.

Please treat this as an integral part of the original bank guarantee to which it  
 would be attached.

Yours Faithfully,

For.....

Manager/Agent/Accountant.....

Power of Attorney No.....

Dated.....

SEAL OF BANK

NOTE: The non-judicial stamp paper of appropriate value shall be purchased in  
 the name of the bank who has issued the Bank Guarantee.

**Proforma: 11**  
**FORMAT FOR PRE-BID QUERIES**

To  
The Chief Engineer,  
Solar Power Generation Department (SPGD)  
3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town,  
Kolkata – 700163

Sub: Pre-Bid queries

Ref. Tender No. : -----

*Dear Sir,*

Having examined the General and Special Conditions of Contract and the Terms of Reference including all attachments thereto, the receipt of which is hereby duly acknowledged, we have some queries and the same are submitted as per the format provided in the tender documents.

<b>Sl. No.</b>	<b>Clause No.</b>	<b>Existing provision</b>	<b>Clarification Required</b>	<b>Suggested text for the amendment</b>	<b>Rationale for the Clarification or amendment</b>

-----

Authorized Signatory  
(Seal and Designation)