NIeT No: WBSEDCL/SPGD/Utility Led Aggregation (ULA)/2026-27/NIT 92 Date - 06/11/2026

Request for Proposal

(Domestic Competitive Bidding)

For

Request for Selection (RfS) of EPC Contractors / RTS Vendors for Design, Engineering, Supply, Installation,Testing and Commissioning of Grid-Connected Rooftop Solar Plants of 1.0 kWp capacity each for 1,00,000 consumers through Gross Metering, including Comprehensive Operation & Maintenance, for 10 years through competitive bidding under the Utility Led Aggregation (CAPEX) Mode under PM- Surya Ghar: Muft Bijli Yojana in West Bengal

WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED

(A Govt. of West Bengal Enterprise)

Solar Power Generation Department

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

BACKGROUND

1.1. The Hon'ble Prime Minister has launched the "PM Surya Ghar: Muft Bijli Yojana" on 13.02.2024 with a financial outlay of over INR 75,000 Crore, aimed at solarizing 1 Crore households by providing free electricity up to 300 units every month. The scheme promotes the Grid Connected Rooftop Solar PV projects. The generated solar power may be utilized for captive application and the surplus power, if any, may be fed to the grid on Net Metering/Gross metering/Net Billing basis, as approved by the respective Electricity Regulatory Commission. The scheme aims to reduce the consumption of fossil fuel-based electricity and make residential consumers self-sustainable from the point of energy consumption to the extent possible.

1.2. Vide Office Memorandum dated 28.12.2024, MNRE has issued Operational Guidelines for implementation of "Payment Security Mechanism" Component and "Central Finance Assistance" Component for RESCO Models/ Utility Led Aggregation Models under PM Surya Ghar: Muft Bijli Yojana. In line with the guidelines issued by MNRE, WBSEDCL intends to select EPC Contractor/ RTS Vendor for setting up of Grid Connected Rooftop Solar systems in CAPEX mode on the roof top of the residential consumers with mandatory comprehensive O&M of 10 years with Division office/ Circle Office (as per the BoQ) of WBSEDCL as cluster.

1.3. In continuation of the above and as part of the Utility Led Aggregation (ULA) Model under PM Surya Ghar: Muft Bijli Yojana, WBSEDCL proposes to undertake the installation of 1.0 kW Grid Connected Rooftop Solar Power Plants in CAPEX mode through Gross Metering arrangement for each eligible beneficiary consumer jointly eligible under Hasir Alo & PMAY , having an average monthly electricity consumption of up to 25 units. The scope of work shall include design, supply, erection, testing, commissioning and comprehensive Operation & Maintenance (O&M) for a period of 10years comprehensive O&M from the date of commissioning of last solar power plant, in accordance with MNRE guidelines and directions issued by the respective Electricity Regulatory Commission.

1.4. CFA from MNRE up to 1.0 kW shall be as per guidelines sanctioned of ULA Model from MNRE. The release of funds to the implementation entity at the state shall be as per the fund flow mechanism issued by MNRE.

1.5. Further, if registered consumers are willing to enhance the solar rooftop capacity beyond the specified limit under this scheme, the consumers are allowed to do so, however eligible CFA shall be as per the guidelines under PM Surya Ghar: Muft Bijli Yojana

1.6. Gross Metering Arrangement shall be applicable for all consumers as per WBERC regulations.

1.7. Further, the Bidder is advised to carefully read all instructions and conditions of this RFS and understand the scope of work completely. All information and documents required as per the RFS must be furnished with the bid. Nodal Agency reserves the right to seek clarifications on submitted bids. Failure to provide the information and/or documents as required shall render the Bid(s) unacceptable for further evaluation and may lead to rejection of the bid(s). All bidders qualifying the technical stage shall be treated at par. Financial Bid of the Bidder qualifying at technical stage only shall be opened.

1.8. Bidder shall be deemed to have examined the RFS, to have obtained information in all matters whatsoever that might affect carrying out of works in line with the scope of work specified in the RFS at the Bid price and to have satisfied himself of the sufficiency of its Bid. The Bidder shall be deemed to know the scope, nature and magnitude of the works and requirement of materials, equipment, tools, and labour involved, wage structures and as to what all works Successful Bidder shall have to complete in accordance with the RFS, irrespective of any defects, omissions or errors that may be found in RFS.

Table of Content

Sl. No.	Section	Description	Page No.
01.	Section –I	Notice Inviting Tender	3-10
02.	Section-II	Instruction to Bidders	11-23
03.	Section -III	General Condition of Contract	24-35
04.	Section -IV	Special Condition of Contract	36-41
05.	Section- V	Technical Specification	42-56
06.	Section –VI	Forms	57-63
07.	Section –VII	Annexure	64-85

NOTICE INVITING TENDER

(Section-I)

West Bengal State Electricity Distribution Company Limited

(A Government of West Bengal Enterprise)
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
CIN : U40109WB2007SGC113473

N.I.T. No – WBSEDCL/SPGD/Utility Led Aggregation (ULA)/2026-27/NIT 92 Date - 06/11/2026

The Chief Engineer, Solar Power Generation Department, WBSEDCL,3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town, Kolkata – 700 163invites e-tender (**online** Bid submission) through Domestic Competitive Bidding (DCB) from eligible bidders for the work as detailed below:

1. Title of the Work

Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation,Testing and Commissioning of Grid-Connected Rooftop Solar Plants of 1.0 kWp capacity each for 1,00,000 consumers through Gross Metering, including Comprehensive Operation & Maintenance, for 10 years through competitive bidding under the Utility Led Aggregation (CAPEX) Mode under PM- Surya Ghar: Muft Bijli Yojana in West Bengal

2. Brief Scope of the Work

1. Details Of Works:

1.1. The Scope of Work includes design as per site conditions, engineering, manufacture/procurement, manufacturer's quality assurance, factory testing, transportation, handling, storage, erection including all civil/structural works, electrical and general works, piping, cabling, installation, provision for data acquisition with communication facility to centralized monitoring system of WBSEDCLs, testing, commissioning, services, project financing, permits/sanction/clearance if any and insurance at all stages of this contract and supply of energy from the Rooftop Solar Plants and Mandatory O&M of the RTS system

1.2. The EPC Contractor /RTS Vendor will design, supply, install, test and commission, operate and maintain Rooftop Solar systems during the Mandatory O&M period on the terrace of Lot wise identified residential consumers. The EPC Contractor/ RTS Vendor shall generate energy from Rooftop Solar Plants and inject into the grid.

1.3. Site Survey, Measurement of solar isolation and other relevant parameters required for design of each system.

1.4. If any consumer from the list provided by Discom is unwilling to install a solar power plant, the Discom will arrange for a suitable replacement (consumer).

1.5. Complete design, engineering, preparation and submission of drawings, equipment and material specification preparation.

1.6. Bidder shall submit Program Evaluation and Review Technique (PERT) chart for the awarded lot to WBSEDCL to get go ahead for the project.

1.7. The Bill of Material (BOM) shall be submitted to WBSEDCL within a week of obtaining Letter of Award of Contract.

1.8. Procurement and expediting of all supplies and delivery of equipment and material to each job site. Dispatch of equipment shall be initiated only upon receiving formal dispatch instructions from the concerned DISCOM authority.

1.9. Pre-commissioning & Commissioning of all supplied Equipment and Test running of Grid

Connect Rooftop Solar Photovoltaic system.

1.10. The Interconnection Point for the RTS system shall be the point at which energy generated by the Rooftop Solar PV plant is supplied to WBSEDCL grid (at the Gross/ Smart metering point).

1.11. Installation of meters supplied by the WBSEDCL

1.12. Remote Monitoring System (RMS) at the households where Rooftop Solar Plants are erected.

1.13. Installation of Machine to Machine (M2M) data loggers and integration with MNRE designated portal as per MNRE guidelines dt.24.12.2025 and OM dt.21.07.25 and integration with ALDC SCADA Sever of WBSEDCL.

1.14. Wiring from the gross Meter up to Distribution Board is in the scope EPC Contractor/ RTS Vendor.

1.15. If the operation or use of the system proves to be unsatisfactory during the Project Tenure, the EPC Contractor/ RTS Vendor shall replace the faulty ones or carry out necessary repairs as per the warranty terms and conditions.

1.16. Obtaining grid connectivity of the Project under this tender would be the responsibility of the bidder in accordance with the prevailing guidelines of the WBERC or Central Electricity Authority (CEA) or DISCOM in the respective area. DISCOM could facilitate connectivity and necessary approvals, however, the entire responsibility lies with the Bidder only.

1.17. Commissioning including Warranty, Mandatory comprehensive O&M for 10 years, goods and services including spares required, if any, during the Project Period. The Bidder has to take all permits and other approvals and licenses, Insurance etc., provide training and such other items and services required to complete the scope of work mentioned above.

1.18. Commissioning of Project is within 03 Months from the date of issuance of LOA.

1.19. RMS integration with Discom platform as per Discom requirement till contract period.

1.20. All data and the Remote Monitoring System (RMS) shall remain the property of the DISCOM, and the vendor shall not impose any restrictions or lock-in on the API access.

1.21. After completion of 10 years from the commissioning of last solar plant or upon termination of the contract, all system data shall be fully migrated and handed over and shall remain the sole property of the DISCOM.

3. Locations of Installation

Project locations shall be across the state of West Bengal

4. Validity of offer

The bids submitted by the bidder shall remain valid for a minimum period of **180 days** from the date of the opening of Technical Bid (online). However, it may have to be extended in case of exigencies with due intimation to successful bidder(s).

5. Total capacity of project

i) Total Project capacity - **100 MW**
ii) Number of sites – 1,00,000 (approx.)

BID DETAILS

Sl. No.	Aspect	Description of Aspect
1	NIeT No.	**WBSEDCL/SPGD/Utility Led Aggregation (ULA)/2026-27/NIT 92 Date - 06/11/20266**
2	Name of work	Request for Selection (RfS) of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation,Testing and Commissioning of Grid-Connected Rooftop Solar Plants of 1.0 kWp capacity each for 1,00,000 consumers through Gross Metering, including Comprehensive Operation & Maintenance, for 10 years through competitive bidding under the Utility Led Aggregation (CAPEX) Mode under PM- Surya Ghar: Muft Bijli Yojana in West Bengal
3	Tender Fee	**NIL**
4	Total Project Cost	**Rs. 550 Crore including taxes and duties (Rupees Five Hundred and Fifty Crore only).**
5	Estimated Tender Cost	**Rs. 303.0 Crore excluding taxes and duties**
6	Bid Security (Earnest Money Deposit-EMD)	**Rs. 6.06 Crore**
7	Validity of offer	**180** (One Hundred and Eighty) days from the date of opening of Technical Bid.
8	Date of Commencement	Date of issuance of LoA
9	Time of completion of work	03 Months from the date of issuance of LOA(Zero date)
10	Defects Liability Period	**60** calendar months from the date of commissioning of the power plant.
11	Tender Inviting Authority	**The Chief Engineer,** Solar Power Generation Department 3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town, Kolkata – 700 163 Website : www.wbsedcl.in Contact No. +919230961800 Email id : cesolar@wbsedcl.in

6. Key- Dates for e-Tendering:

Sl. No.	Activity	Date & Time
1	Publishing Date	**13.11.2026 at 04:00 PM**
2	Document Download start date	**13.11.2026 at 04:30 PM**
3	Last date of submission of queries if any for pre-bid meeting (only through email) within	**18.11.2026 up to 12:00 PM**
4	Date of Pre-bid Meeting	**18.11.2026 at 2:00 PM**
5	Start date of Bid submission (online)	**20.11.2026 at 04:00 PM**
6	End date of Bid submission (online)	**09.12.2026 up to 04:00 PM**
7	Last Date and time of physical submission of EMD BG	**10.12.2026 up to 01:00 PM**
8	Technical Bid Opening Date	**11.12.2026 at 04:00 PM**
9	Financial Bid Opening Date	To be notified later on.

7. Place of Pre-bid meeting

Office of the Chief Engineer
Solar Power Generation Department, 3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town, Kolkata – 700 163

8. Completion time

Irrespective of quantity, completion time shall be 03 Months from the date of issuance of LOA. The completion time includes the time for survey.

9. Distribution of Work

WBSEDCL shall distribute the total scope of work comprising the installation of a 100 MW Rooftop Solar Project across 1,00,000 sites at the time of issuance of the Letter of Award (LoA), in the following manner:

i) **Award to L1 Bidder:**

Sixty percent (60%) of the total scope of work shall be awarded to the **L1 Bidder** at the **lowest acceptable price schedule**, subject to the Bidder's continued compliance with all the terms and conditions of the tender and fulfilment of all applicable eligibility requirements.

ii) **Award to L2 and L3 Bidders:**

The remaining **forty percent (40%)** of the total scope of work shall be allocated equally between the **L2 and L3 Bidders**, i.e., **twenty percent (20%)** of the total scope of work each, provided that they unconditionally agree to execute the work at the **lowest acceptable price schedule** accepted by WBSEDCL, without seeking any modification, qualification, or deviation from the original terms and conditions of the tender, including the technical specifications, scope of work, quality standards, and contractual obligations.

iii) **Award to Subsequent Technically Qualified Bidders:**

In the event that either the **L2 Bidder** or the **L3 Bidder** declines or fails to accept the **lowest acceptable price schedule** on the terms specified above, the corresponding **twenty percent (20%)** share of the total scope of work shall be offered, in the order of financial ranking, to the next **technically qualified bidder(s)**, commencing from **L4**, subject to such bidder(s) furnishing unconditional acceptance of the **lowest acceptable price schedule** and agreeing to execute the work strictly in accordance with the original terms and conditions of the tender, without any alteration, modification, qualification, deviation, or compromise in the prescribed scope of work, technical specifications, quality standards, or contractual obligations.

iv) **For details of Work Distribution methodology refer clause 25 of ITB.**

v) If there will be any residual quantity of work after initial distribution, the residual quantity of work shall be distributed among the executing EPC Contractors / RTS Vendors equally.

vi) If the performance of any contractor is not found satisfactory toward achievement during implementation of project, the allocation of the said contractor may be reduced and may be reallocated to the well performing vendors. The performance of the contractor shall be judged on regular basis.

10. Qualifying Requirement for Bidders

The Bidder must have to meet the following minimum qualification for the work as follows:

11. Eligibility Criteria for Participants:

A. General

- This Invitation for Bids, issued by WBSEDCL is open to Sole Proprietorship, Registered Partnership Firm (as per the Partnership Act, 1932), Limited Liability Partnership (under the LLP Act, 2008), a Company incorporated under the Companies Act, 1956/2013 (as amended), or a Statutory Body, barring those bidders, which have been placed under Holiday Listing and the term/duration of such listing has not yet expired. Bidders must submit Declaration regarding Holiday Listing in the format as per annexure XVI/ XVII.

- 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:

  - ❖ They have a controlling partner in common,
  - ❖ They receive or have received any direct or indirect subsidy from any of them; or
  - ❖ They have the same legal representative for purpose of this bid; or
  - ❖ 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
  - ❖ 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], 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;
  - ❖ 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
  - ❖ 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:

  - ❖ is a qualified manufacturer or erector who supply, erect, testing and commission of the type specified and has adequate technical knowledge and practical experience;
  - ❖ 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);
  - ❖ has adequate financial stability and status to meet the financial obligation pursuant to the scope of the works;
  - ❖ 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
  - ❖ 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, Labour 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.

B. **Technical Eligibility Criteria**

The Bidder shall have minimum technical experience in Supply, Installation & Commissioning of Grid connected Solar PV Power plants having cumulative capacity of not less than **10 MW (AC)** anywhere in India under order of any Government Department / Government Owned Company/ Government organization/ Government Institution/ Parastatal / under any Government Program/Any Private Organization System connected to the DISCOM Grid during preceding 07 (Seven) years ending from the Bid submission start date.

- The certification by the bidder for his own Solar PV power plant shall not be acceptable.
- Bidder should submit, in support to the above, the list of projects commissioned along with their work order/ LOA and the commissioning certificates from the Solar Power plant owner.
- 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.
- Joint Venture and Consortium are not allowed to participate.
- (Documentary evidence) for residential consumers against Technical Eligibility Criteria mentioned above such as Letter of Award/ Purchase Order/ Work Orders and Commissioning Certificates shall be submitted to the extent of works done. Further, vendor can also provide list of installation in PM-Suryaghar portal to be provided by vendor and same to be matched with DISCOM list. In case of any discrepancy Discom list will be final.
- For Commercial & Industrial (C&I) consumers, Supporting Documents such as Letter of Award/ Purchase Order/ Work Orders and Commissioning Certificates shall be provided by vendor for the purpose of technical evaluation.
- Bidders/EPC Contractors/RTS vendors who are not registered or empaneled with the MNRE PM-Surya Ghar: Muft Bijli Yojana portal, must submit declaration with BID document that they will complete their registration on and before signing of contract agreement.

C. **Financial Eligibility Criteria**

- Legal Constitution and Statutory Registrations: The bidder must be either a Sole Proprietorship, Registered Partnership Firm (as per the Partnership Act, 1932), Limited Liability Partnership (under the LLP Act, 2008), a Company incorporated under the Companies Act, 1956/2013 (as amended), or a Statutory Body. The bidder shall submit valid and up-to-date copies of the following documents, as applicable: Trade License, Certificate of Incorporation/Registration Certificate, PAN Card, PF Registration, ESI Registration, Profession Tax Enrolment Certificate, GST Registration (GSTIN), Labour License, Contractor License
- Audit Reports: The bidder must submit: Audit Reports for the last three (3) Financial Years for entities registered under the Companies Act. Tax Audit Reports for Sole Proprietorships and Partnership Firms for the same period.
- Income Tax Compliance: The bidder must submit: Income Tax Returns for the last three (3) Assessment Years Latest Income Tax Assessment Order issued by the relevant authority.
- Minimum Average Annual Turnover: The bidder must have a minimum average annual turnover of at least **30%** of the **Estimated Tender Cost** during the last three (3) consecutive Financial Years(FY 2023-24, 2024-25 & 2025-26). Turnover figures must be certified by a Statutory Auditor or Chartered Accountant, based on audited financial statements. The certificate must clearly mention the Unique Document Identification Number (UDIN).
- Working Capital Requirement: The bidder must possess minimum working capital equivalent to **30%** of the **Estimated Tender Cost**, in the financial year immediately preceding the bid submission.

- Working capital is computed as: (Actual Working Capital as per latest audited financials) + (Sanctioned Credit Limits – funded and non-funded).

- A certificate in the prescribed format from a Scheduled Commercial Bank, clearly indicating the sanctioned credit limits (Certification not prior to three months from the bid submission date shall be allowed), must be submitted.

- The actual working capital computation must be certified by a Statutory Auditor or Chartered Accountant with UDIN, referencing the relevant Balance Sheet schedule, if any.

- Details of Fixed Deposits as per latest audited financials (including FD number, maturity date, and lien/hypothecation details, if any) must also be certified by the CA/Auditor.

Note: Working capital is defined as Current Assets minus Current Liabilities, representing the bidder's short-term financial health and ability to support day-to-day operations.

- Positive Net Worth: The bidder must have positive net worth in each of the last three (3) Financial Years. Net worth = (Paid-up Capital + Free Reserves) – (Accumulated Losses + Intangible Assets) Exclude revaluation reserves. Must be certified by a Statutory Auditor or Chartered Accountant, with UDIN.

- The bidder should be a registered company incorporated in India under the Companies Act, 1956 or 2013 or Partnership Firm registered as per Partnership Act 1932 or Statutory Body and must submit Trade license, Certificate of Incorporation / Registration Certificate, PAN Card, PF Registration, Profession Tax Registration, GST Registration (GSTIN) as per the applicability.

- Financial Consortium: Participation through financial consortium is not permitted in this bidding process.

- In case a Bidder is quoting for more than one package, prequalification requirement shall be examined on the basis of the cumulative capacity of requirement of experience for all quoted packages.

12. Address for communication

The Chief Engineer,
Solar Power Generation Department
3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town, Kolkata – 700 163
Website : www.wbsedcl.in
Contact No. +919230961800/ 9230964010/ 9230961807
Email id : cesolar@wbsedcl.in

Chief Engineer, SPGD
WBSEDCL

INSTRUCTIONS TO BIDDERS

(Section-II)

1. **Name of the Work:**

Design, Engineering, Supply, Installation,Testing and Commissioning of Grid-Connected Rooftop Solar Plants of 1.0 kWp capacity each for 1,00,000 consumers through Gross Metering, including Comprehensive Operation & Maintenance, for 10 years through competitive bidding under the Utility Led Aggregation (CAPEX) Mode under PM- Surya Ghar: Muft Bijli Yojana in West Bengal.

2. **Scope of Work:**

As mentioned in the Notice Inviting e- Tender (NIeT)

3. **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://wbtenders.gov.in for the above tender.

4. **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)".

5. **Tender Fee:**

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

6. **Earnest Money Deposit:**

The Intending Bidders shall have to furnish an EMD amount equal to 6.06 Crore 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) as per Annexure VI 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 Bhavan 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 24 Hrs, to avoid any complicacy.

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.

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.

Bid Validity:

The Tender and 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 offer.

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.

Any evidence of unfair Trade Practices including over charging, price fixing, cartelization etc. as defined in various statutes, will automatically disqualify the bidders.

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.

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 and Technical Specification of this tender.

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://wbtenders.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.

All the important correspondence must be done through declared authorized email-id with scanned copy of documents/letter in company's letter head/pad. However hard copies (1 Set) of Tender document in original should reach our office through post / by hand from your end within the stipulated date. Any short of delay will not be entertained under any circumstances.

7. Role of Respective Authority

- Allotment of roof for installation of Solar Power Plant.
- Issuance of necessary gate pass.
- Providing water source inlet point from which module cleaning arrangement may be provided at the project site.
- Arrange safety and security of the project.

8. Confidentiality:

i. 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.

ii. 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.

9. General Guidance For E-Tendering :

CLARIFICATION OF BIDDING DOCUMENTS & PRE-BID MEETING

i. 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@wbsedcl.in** or physically at Solar Power Generation Department (SPGD), WBSEDCL at 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..

ii. 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 e-mail 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. 21of ITB.

iii. The Pre-bid meeting will be held on scheduled date and time as mentioned NIeT 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.

iv. 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.

10. Deviation:

This tender is a 'No Deviation' tender.

11. 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 document 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.

12. 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.

13. Procedure Of Submission Of Bids:

I. General process of submission

a) 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.

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

c) 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.

d) 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.

e) 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, Successful bidders at the time of evaluation of Bid, bidders may be asked for producing the documents in original for verification.

II. Technical Proposal

The Technical Proposal shall contain scanned copies and/or declarations in the following standardized formats in two covers (folders).

A. Statutory Cover

a) To be submitted in "Drafts" folder

i. Tender Fee: Nil

ii. Earnest Money (EMD)

Scanned copy of the Bank Guarantee (if not paid online) against Earnest Money Deposit (EMD), in favour of WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED' payable at Kolkata as prescribed in clause no. 6 of ITB.

b) To be submitted in "Annexure" folder

i. Application for Tender (*Vide Annexure – I*)

ii. Pro-forma for offered quantity*(Vide Annexure – III)*

iii. Brief of vendor profile (*Vide Annexure – XII)*

iv. Profile of Projects Completed(*Vide Annexure – XIII)*

c) To be submitted in "NIT" folder

i. Notice Inviting Tender (NIT) with Company Stamp and Signature

ii. Addenda /Corrigenda if published, Pre-bid Minutes with Company Stamp and Signature.

Note: Bidders are to keep track of all the Addendum/Corrigendum/ Pre-bid Minutes issued with this 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. Pro-forma for undertaking to be submitted by the Bidders *(Vide Form – IV)*

iii. Summary statement of average annual turnover*(Vide Form – II)* 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.

iv. Statement of orders executed during last three financial years*(Vide Form – III)*.

v. Format of Letter of Bid *(Vide Form – V)*

(**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.

B. Non-Statutory Cover (My Document)

i. Company Details:

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

1) **Copy of Certificates:**
2) PAN Card.
3) Professional Tax (PT) Registration with current Challan.
4) GST Registration Certificate (GSTIN).
5) PF Registration Certificate &current Challan.
6) ESIC & current Challan.

Note: In case of any change in Company's/ Firm's name duly incorporated under applicable Law in India, then Certificates in old company's name along with the Application for Change of Name of the Certificates duly acknowledged by the Issuing Authority may also be considered.

ii. Financial Info:

1) Income Tax Return for the last 03 (three) assessment years

2) Proforma for Evidence of Access to or Availability of Credit/Facilities (*Vide Annexure -III*)

3) A certified copy from a practicing Chartered Accountant to be produced in support of working capital for last three (03) preceding year or last year as case may be.

4) Same certified copy to be produced in support of 'Annual Turnover' also.

iii. Credential:

As per Clause No. 11(B) of the Technical Eligibility Criteria under Section I

a) Copy of the Order(s)/Contract Agreement(s) for already executed work issued by the Owners/ Purchasers.

b) Commissioning Reports and Completion Certificates duly authenticated by Beneficiary

iv. Declaration:

1)List of Orders in hand.

(The bidder shall submit the list of orders in his hand mentioning the order value to be executed within one year from the date of submission of bid)

2)Declaration for Minimum Guaranteed Generation *(Vide Annexure -IV).*

3)Bill of Material *(Vide Annexure -V).*

4)List of key personnel available and proposed to be engaged for the project mentioning their experience

and qualification.

Note:

- **Failure of submission of any one of the above mentioned documents will render the tender liable to summary rejection.**
- **The documents uploaded should be digitally signed using the Digital Signature Certificate (DSC).**

III. Financial Proposal

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

Bill of Quantities (BOQ)

The bidder shall have to quote the rate online in the space marked for offering their rate in the BOQ vide Annexure –II (Pro-forma: – PRICE BID).

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

14. Submission of Original Copies of Documents And Earnest Money Deposit:

i. **Mode of Payment***:* EMD must be submitted online or through Bank Guarantee (BG) of any scheduled Bank of India. Payment in any other form will not be accepted.

ii. **Place of submission**: The original copies of the BG (if not paid online), towards Earnest Money shall be submitted in the following office:

Office of the Chief Engineer,
Solar Power Generation Department (SPGD),
West Bengal State Electricity Distribution Company Limited,
3rd Floor, Data Centre Complex, Street No. 41, Action Area-I, New Town, Kol – 700 163.

iii. **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 super- scribing the name of the work with NIeT 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.

15. 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.

16. 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.

17. Performance security/Contract Performance/Additional Performance Security:

The Successful bidder shall submit a Performance Guarantee within 10 (ten) days from the date of issuance of LOA in the form of Bank Guarantee (PBG) as per Annexure-VII for an amount not less than 10% (ten percent) of the total value of the contracts valid initially for a period of 03 months with a claim period of 03 (three) months and extendable up to 10 years till completion of the O&M period.

The above mentioned PBG shall also cover the guarantee against minimum annual generation of the plant upto initial O & M period of 10 (Ten) years from the final date of commissioning of the entire plant.

Release of Performance Security:

50% (fifty percent) of the Performance Security shall be released after completion Project execution and 05 (five) O&M years, subject to satisfactory O&M of the Plants. The remaining 50% (fifty percent) of the Performance Security shall be released after completion of the next 05 (five) O&M years, subject to satisfactory O&M of the Plants.

In case of failure of requisite O&M of the plants on part of the Contractor, in either year the relevant penalty clause shall be imposed and the Contractor will have to submit full amount of PBG i.e. 10% of the of the total value of the contract during next year.

Additional Performance Security (APS)

If L1 bidder has quoted bid rate 80% or less of the estimated cost put to the tender then additional Performance Security @10% of the Estimated Tender Cost have to be submitted by the bidder in the form of Bank Guarantee from any scheduled bank within 15 working days from the date of issuance of Letter of Award by the bidder. If the bidder fails to submit the Additional Performance Security within schedule time, his EMD will be forfeited. The Additional Performance Security shall remain valid up to Defect Liability Period of sixty (60) calendar months, with an additional claim period of ninety (90) days, failing which his bid security may be forfeited.

18. Forfeiture Of Performance Security/Contract Performance Guarantee

Performance Security/Contract Performance shall be forfeited if,

i. The successful bidder do not execute the work after placement of Letter of Award (LOA) and/or,

ii. The successful bidder discontinue the work without prior permission of the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL and/or,

iii. The successful bidder fails to install/procure the total capacity of the plant as mentioned in the tender document and/or,

iv. 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,

v. The successful bidder fails to rectify/replace of the defective/damaged equipment(s)/work(s) within the Defect Liability Period.

vi. The contractor fails to perform/neglect the operation and maintenance activity of the plant as per contract.

19. 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.

20. 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.

21. Determination of Responsiveness:

1. Prior to be detailed evaluation of Bids, WBSEDCL will determine whether each Bid is substantially responsive to the requirements of the bidding documents.

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.

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.

4. Although details presented in this NIeT 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

22. Correction of Errors:

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.

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).

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. Opening And Evaluation of Tender:

A. Opening of Technical Proposal

i. Technical proposals will be opened by the Tender Inviting Authority or his authorized representative electronically from the web site stated above, using their Digital Signature Certificate.

ii. Technical proposals for those tenders, whose original copies of EMD (In case of BG) have been received, will only be opened. Proposals corresponding to which original copy of EMD (In case of BG) has not been received, will not be opened and will be stood rejected.

iii. Intending bidders may remain present, if they so desire.

iv. Cover (Folder)for Statutory Documents(vide Clause 13.2.A)will be opened first and if found in order, Cover (Folder) for Non-statutory Documents (vide Clause 13.2.B) will be opened. If there is any deficiency in the Statutory Documents, the tender will summarily be rejected.

v. Decrypted (transformed into readable formats) documents of the Statutory and Non-statutory Covers will be downloaded for the purpose of evaluation.

B. Technical Evaluation of Tender

i. While evaluation, the Tender Inviting Authority or his authorized representative may summon the participating bidders and seek clarification/information or additional documents or original hardcopy of any of the documents already submitted and if the clarification/document not be produced within the stipulated time frame, their proposals will be liable for rejection.

ii. The summary list of participating 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.

C. 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:

v. Where there is discrepancy between amount in figures and in words, the amount in figures shall be considered.

vi. 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.

vii. Conditional discounts/ rebates, if any, offered by the bidders shall not be taken in to consideration for evaluation.

viii. The discounted price in Price bid-3C shall be considered for evaluation purpose only and shall have no relation with the contract price. The contract price shall be finalized based on actual rate quoted subject to bid responsiveness and bid correction.

Note: 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 for by the Tender Inviting Authority.

24. Application For Tender:

The bidder should submit the Application for Tender as per **Annexure - I** attached with this tender document. Not submitting the Annexure will cause for rejection of the respective bid.

25. Acceptance Of Tender:

Lowest valid rate of the tender will be accepted. However, WBSEDCL reserves the right to accept or reject any bid partly or fully or cancel the bidding without assigning any reason thereof and in such case no bidder/ intending bidder shall have any claim arising out of such action. If the offer is submitted without or inadequate

Bid Security (Earnest Money), the bid shall be considered as rejected. Incomplete offer will be liable for rejection

.

26. Letter Of Award:

Letter of Award will be given to the successful bidders to convey the decision of the tender inviting authority regarding the selection of contractor. 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 or Intimation Letter as the case may be, failing which the job may subject to be cancelled and EMD of the successful bidder will be forfeited.

WBSEDCL shall adopt the L1 Price-Matching Work Distribution Methodology for allocation of the total Project Capacity, in accordance with the following principles:

1. The Benchmark Price shall be the price quoted by the Lowest Evaluated Bidder (L1), as accepted by WBSEDCL.
2. The L2 Bidder and the subsequent technically qualified bidder(s), in the order of financial ranking (L3, L4, and so on), shall be invited by WBSEDCL to execute the Work at the Benchmark Price (L1 Price).
3. Total Project Capacity will be distributed among the bidders who will accept the L1 rate.
4. Where fewer bidders accept the Benchmark Price, WBSEDCL may allocate a proportionately larger share of the Work to the L1 Bidder.
5. WBSEDCL reserves the right to modify the distribution depending on the bidding scenario.
6. The methodology for allocation of the Work shall be as per the following scenarios:

Scenario	Work Allocation
Three bidders (L_1 + two L_1-price matching bidders)	60% to L_1 bidder and 20% each to the other two bidders
Two bidders (L_1 + one L_1-price matching bidder)	70% to L_1 Bidder and 30% to the L1 price matching bidder
No bidder other than the L1 Bidder accepts the Benchmark Price	100% of the work shall be awarded to the L_1 bidder
Unsatisfactory performance during contract execution	WBSEDCL may, at its sole discretion and in accordance with the provisions of the Contract, reduce the scope of work allocated to such Contractor and reallocate the unexecuted portion to other Contractor(s), on such terms and conditions as may be deemed appropriate by WBSEDCL.

Note:

1. WBSEDCL reserves the right to deviate from the above methodology, in whole or in part, if considered necessary in the interest of the Project, subject to applicable procurement rules and the provisions of the Contract.
2. The distribution of sites among the bidders shall be carried out in such a manner that each bidder is allotted site spread across the state.
3. The requisite PBG/ Retention Security BG will be adjusted as per the awarded contract capacity on pro-rata basis.

27. Notification Of Award (Letter Of Award):

Solar Power Generation Department (SPGD), WBSEDCL will notify the successful bidder in writing by placement of Letter of Award (LOA) before the expiration of the period of validity of the offer and after receiving all the requisite documents.

28. Minimum Guaranteed Generation (MGG):

Bidders shall have to ensure Minimum Guaranteed Generation as per table below for the first year after final commissioning and at a reduced rate of 0.8% per year for subsequent years of plant life. Initially, the above Guarantee shall be required for the 10 years O&M period. The same guarantee shall continue for extended O & M period, if agreed on mutual terms & conditions. The bidder shall design their plant to achieve the Minimum Guaranteed Generation. No relaxation in MGG will be considered for any other losses occurred in the system. The bidder shall submit a declaration for the Minimum Guaranteed Generation with their bid as per **Annexure - IV.** Non-submission of the said document will entail for disqualification of the bidder.

Districts/Regions	Minimum Guaranteed Generation (MGG) Target
Paschim Midnapore	1200 Unit/Year/KWp
Purba Midnapore	1200 Unit/Year/KWp
Jhargram	1200 Unit/Year/KWp
Bankura	1200 Unit/Year/KWp
Purulia	1200 Unit/Year/KWp
Howrah	1100 Unit/year/KWp
24 Parganas (South)	1100 Unit/year/KWp
24 Parganas (North)	1100 Unit/year/KWp
Bidhannagar	1100 Unit/year/KWp
Purba Burdwan	1100 Unit/year/KWp
Paschim Burdwan	1200 Unit/Year/KWp
Hooghly	1100 Unit/year/KWp
Murshidabad	1100 Unit/year/KWp
Nadia	1100 Unit/year/KWp
Birbhum	1200 Unit/Year/KWp
Malda	1000 Unit/year/KWp
Dakshin Dinajpur	1000 Unit/year/KWp
Uttar Dinajpur	1000 Unit/year/KWp
Darjeeling	900 Unit/year/KWp
Alipurduar	900 Unit/year/KWp

Jalpaiguri	900 Unit/year/KWp
Coochbehar	900 Unit/year/KWp
Kalimpong	900 Unit/year/KWp

29. Contract Agreement:

The contractor (successful bidder) shall have to be entered into a Contract Agreement within **10 (Ten) Days** from the date of issuance of Letter of Award for the proper fulfilment of the contract as per **Annexure VIII**. The date of LOA shall be reckoned as Zero Date of the Project. 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 **Annexure-IX** within **10 (Ten) Days** from the date of issuance of Letter of Award.

31. Time Schedule:

a) Initially list of prospective sites shall be provided along with the LOA from which the technically feasible sites of cumulative awarded capacity shall be found out after conducting proper survey.

b) After sharing of site details, the Agency shall begin the construction and installation work at each site.

c) However the (O&M) along with 10 Years Comprehensive AMC shall be commenced from date of handing/taking over of the last completed site.

d) The entire Project shall be completed within a period of **Three (3) months** from the **Zero Date**, in accordance with the following implementation milestones

32. 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.

33. For Any Queries, Please Contact The Followings:

Sl. No.	Related Matter	Email ID	Contact Details
1.	Technical Matter	spgd.projects@wbsedcl.in	9230964010/9230961807
2.	Financial Matter	spgd.fa@wbsedcl.in	9230961811

GENERAL CONDITIONS OF CONTRACT

(Section-III)

Definition of Terms:

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

i. The **'Owner' /'Purchaser'/'Company'** shall mean the WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LTD, having its Office at Vidyut Bhavan, Block-DJ, Sector-II, Kolkata – 700091 and shall include its successors and assigns.

ii. The **'Engineer-in-Charge'/ 'Controlling Officer'** shall mean the Engineer designated by the Company for the purpose of carrying out this contract.

iii. **'Company's representative'** shall mean any person or persons or consulting firm appointed/authorized 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 assignees.

v. The **'Sub-Contractor'** shall mean any person/agency to whom any part of the contract has been sublet by the contractor with the consent in writing of the Company and will include the legal representatives, successors and permitted assigns of such persons/agency.

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 Contract'/'Commencement Date'** shall mean the date on which Letter of Award will be issued.

xvi. **'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.

xvii. **'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.

xviii. **'Approval'** shall mean the written approval of WBSEDCL and/the statutory authorities, wherever such authorities are specified by any codes or otherwise.

xix. **'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.

xx. **'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 worked covered by the specifications. All these labourers will be deemed to be employed primarily by the Contractor.

xxi. **'Plant'/'Equipment'/'Stores'** means and include plant and machineries to be provided under the contract.

xxii. **'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.

xxiii. **'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.

xxiv. **'Commissioning'** shall mean the satisfactory, continuous and uninterrupted operation of the equipment/work as specified after all necessary initial tests, checks and adjustments required at site for a period of at least 15 (fifteen) days to the satisfaction of WBSEDCL.

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:

Design, Engineering, Supply, Installation,Testing and Commissioning of Grid-Connected Rooftop Solar Plants of 1.0 kWp capacity each for 1,00,000 consumers through Gross Metering, including Comprehensive Operation & Maintenance, for 10 years through competitive bidding under the Utility Led Aggregation (CAPEX) Mode under PM- Surya Ghar: Muft Bijli Yojana in West Bengal

2. Location of Installations:

Various eligible houses across the state of West Bengal shared by WBSEDCL.

3. Mode of Execution:

The entire work will have to be executed on turnkey basis. Any minor item(s) not included in the schedule or specification but required for completion of the work will have to be carried out/supplied without any extra cost. While submitting the offer the Bidder will consider cost of those items and may indicate separately as additional deliverable items.

4. 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.

5. Completion Time:

The whole work must be completed in all respect as mentioned in the clause no 31 of ITB.
A detailed time schedule for the site work has to be prepared and submitted by the contractor within **15 (fifteen) days** from the date of issuance of the Letter of Award (LOA) along with the Letter of unconditional acceptance of the LOA.

6. Acceptance of Letter of Award:

The Contractor shall submit unequivocal acceptance of LoA within **07 (Seven) days** from the date of issuance of the Letter of Award (LOA).

7. 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 programme 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.

8. Submission of Detailed Design Report:

The contractor shall submit 03 (three) sets of the Detailed Design Report hard copy along with editable soft copy for approval within 7 Days from the date of Approval of sites.

9. Variation, Additions and Omissions:

WBSEDCL reserves the right to alter, amend, omit or otherwise vary the quantities as may be necessary but such variation will be limited to +/- 25% (Plus or minus twenty five percent) of the contract price. Payment shall be made as per actual execution. The quoted rate of each item shall remain firm.
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.

10. 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.

11. Departmental Material:

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

12. 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 due to force majeure.
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.

13. 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 programme chart as facts may justify.

14. Liquidated Damage:

If the Contractor shall fail to complete the delivery within the time stipulated herein or within extended time of completion, then the Contractor shall pay to the Company a sum amounting to 0.143% of the value of work as liquidated damages for each day of delay which shall elapse between the scheduled or extended time as the case may be and the date of final completion of the work, subject to a maximum of Ten percent (10%) of the value of Contract Price.

WBSEDCL may, without prejudice to any or all other method of recovery, deduct the amount arises out of such delay in completion of delivery, from any money in its hand due or which 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.

15. 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.

16. 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.

17. Defect Liability Period:

The term 'Defect Liability Period' shall mean the period of 05 years (Five years) from the Date of final completion and handing over of the entire project work. If any defect against the new executed work is found within the defect liability period the contractor shall be liable to rectify/replace the materials at their own cost and responsibility.

18. Subletting of Contract:

The contractor shall not, without the written consent of the WBSEDCL, 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 form 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.

19. 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, special courier, cable, telegraph, telex, facsimile (fax) or Electronic Data Interchange (EDI), e-mail to the address of the relevant party.

Any notice sent by cable, telegraph, 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.

20. WBSEDCL's Right to Terminate Contract:

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.

21. Approval:

Drawing:

The contractor shall submit requisite Design Calculations and Drawings to WBSEDCL for approval.

Material OEM:

The list of approved material OEMs, as approved by WBSEDCL on the date of issuance of this Tender, is enclosed as **Annexure-XIX** and shall be applicable for execution of the Project. In case the successful bidder proposes to procure materials from any OEM not included in the said approved list, such OEM shall be considered only after obtaining approval from WBSEDCL through the prescribed factory approval process. The proposed OEM shall satisfy all requisite technical, quality, manufacturing and inspection requirements of WBSEDCL and no procurement or supply from such OEM shall be permitted unless formal approval is accorded by WBSEDCL. The detailed procedure and format for Factory Approval are enclosed as **Annexure-XX** .

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, lodging and fooding 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.

22. Submission of Progress Report:

The contractor shall submit the field progress report **fortnightly** 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.

23. 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.

Insurance after commissioning of PV Power Plant: After commissioning and taking over of the plant, comprehensive insurance of the plant covering all risks (Fire & allied perils, theft, earth quake, flood, lightning, public rampage, terrorism, STFI, and others) as required will be on the scope of the EPC contractor for entire period of 10 years of O&M. In the event of any force majeure situation the contractor will rectify the defect and lodge and settle the claim before the Insurance Company on behalf of WBSEDCL.

Insurance claim settlement for the company, if any, will be reimbursed to the contractor upon settlement of the claim amount for such restoration work. As such the bidder shall include the price of such insurance in their price bid as part of the price of work.

In case of insurance claims for any damage/loss of the plant, the awarded agency must intimate insurance company as well as WBSEDCL within 48 hrs from the occurrence of the damage of the plant, otherwise accountability will be vested upon the EPC Contractor.

Insurance policy document, premium receipts etc. should be submitted to WBSEDCL.

24. 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 complete systems of the Solar PV Power Plant will be 120 (One Twenty) calendar months from the date of successful handover of the plant. However, the performance guarantee of the PV Module shall be minimum 30 years as per guideline of Ministry of New and Renewable Energy (MNRE), Government of India.

Warranty period of Inverters and other major items shall be 10 years from the date of successful handover of the plant. Consumable items are beyond the scope of Warranty after 10 years (O&M) period.

Solar PV Modules will be guaranteed for minimum 10 (ten) years for any manufacturing defects.

The contractor shall remain liable to replace any defective parts that may develop in the plant of his own manufacture or that of his sub-contractors 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 (Proforma 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.

All the OEM shall sign End User Warranty Agreement directly with WBSEDCL or WBSEDCL shall be one of the Parties, who can claim warranty of any material, anytime directly from the OEMs. However, the EPC 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.

25. Comprehensive Maintenance Contract:

Maintenance contract shall be commence after commissioning of the plant.

10 (Ten) years comprehensive maintenance of the plant shall be in the scope of work. The contractor needs to submit 02 (two) sets of comprehensive user's manual and 02 (two) sets of Maintenance format book suitably useable for 120 months.

The scope of maintenance shall include supply of spare parts, replacement of all damaged equipment and accessories with new one within the price of yearly maintenance charge.

The Down-Time of PV system should not be more than 72 hours (03 days).

The agency shall maintain stock of different solar plant items in such a way that the above Down-Time for every system shall be ensured.

The maintenance includes Routine and preventive, Breakdown and Capital Maintenance which shall be but not limited to the following:

Routine and Preventive Maintenance:

This shall include periodic:

i. Cleaning of PV modules fortnightly.
ii. Checking & tightening of all electrical connections and mechanical fittings.
iii. Checking and restoring of earthing system.
iv. Cleaning of Inverter and other electrical equipment's.
v. Routine maintenance as recommended by the original equipment manufacturer.

The contractor shall be responsible to carry out routine and preventive maintenance and replacement of each and every damaged/faulty component/equipment of the power plant and he shall provide all labour, material, consumables etc. for routine and preventive maintenance at his own cost. Contractor must accord approval of Operation & Maintenance format

Breakdown Maintenance:

Breakdown maintenance shall mean the maintenance activity including repairs and replacement of any component or equipment of the power plant which is not covered by routine and preventive maintenance and which is required to be carried out as a result of sudden failure/breakdown of that particular component or equipment while the plant is running. The supplier shall be responsible to carry out breakdown maintenance of each and every component of the power plant and he shall provide the required manpower, materials, consumables, components or equipment etc. for breakdown maintenance at his own cost irrespective of the reasons of the breakdown/failure.

Capital Maintenance:

Capital Maintenance shall mean the major overhaul of any component or equipment of the power plant which is not covered by routine, preventive and breakdown maintenance which may become necessary on account of excessive wear & tear, aging, which needs repair/replacement. The capital maintenance of power plant and all civil structures shall normally be planned to be carried out on an annual basis. For this purpose a joint inspection of all the major components of the power plant shall be carried out by the Contractor and WBSEDCL, about two months before the end of each annual maintenance year, in order to ascertain as to which components of the power plant require capital maintenance. A joint inspection report and proposed action plan in this respect shall have to be submitted by the contractor. In this regard the decision of WBSEDCL will be final and binding.

However, if the condition of any plant component warrants its capital maintenance at any other time, a joint inspection of WBSEDCL and supplier shall be carried out immediately on occurrence of such situation and capital maintenance shall be carried out by arranging the shutdown of the plant/part of the plant, if required, in consultation with concerned authorities. The decision of WBSEDCL shall be final and binding to the contractor.

The capital maintenance also includes painting of mechanical & civil structures etc.

The contractor shall undertake necessary maintenance/troubleshooting work of the Solar PV Power Systems. Down time shall not be more than 72 hours or granted time from time of occurrence of such faults. Adequate measures should be taken for prevention of wear and tear of the machines. Solar PV Power System is to be designed to operate with a minimum of maintenance.

The scope of support service provides preventive maintenance as & when necessary within the contract period and break down maintenance in the event of malfunctions, which prevent the operation of the power system or part of it within the stipulated time period & free replacement of spares required for maintenance.

The contractor will provide Spare parts &Measuring Instruments as mentioned in the Technical section.

The contractor shall submit the detailed schedule for routine and preventive maintenance before final commissioning of the plant. The contractor shall also submit Detailed Report to WBSEDCL for any capital or breakdown maintenance mentioning the cause of breakdown, actions taken to resolve that issue and preventive measures taken to avoid failure/damage/loss of generation due to similar incidents/accidents in future etc. within 07 (seven) days from the date of recovery.

Maintenance Report:

Quarterly Maintenance Report comprising of Monthly Generation Data (screen shot to be attached for generation meter reading)for that particular quarter, period of grid outage, major break downs & rectifications and any other required details for each location as per approved format must be submitted to WBSEDCL by the contractor.

The payment shall be made on quarterly basis on submission of bills in triplicate to WBSEDCL and the Eligible amount will be due for payment after the certification by the controlling officer subject to satisfactory performance and submission of maintenance report, Insurance documents in regular basis.

26. Penalty:

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

a. If the contractor fails to repair/replace any defective material/equipment for which generation is hampered any equipment failure within the downtime as mentioned in clause no. 25 of GCC/the time period granted by the controlling officer after receiving such prayer from the contractor in writing, a sum amounting to two percent (2.00%) of annual maintenance charge for every week or part thereof subject to maximum 10% (ten percent) will be deducted from the annual maintenance charge of that particular year. If the system is not made operational within granted time, WBSEDCL/Beneficiary may rectify the same and recover the expenses from Maintenance charges or any other payment of the contractor and/or PBG retained by WBSEDCL.

b. If the plant fails to generate the Minimum Guaranteed Generation as per Clause No. 28 of ITB, will realize the cost of Generation shortfall at the average rate of power purchase of WBSEDCL as per the Tariff Order issued by West Bengal Electricity Regulatory Commission (WBERC) from Annual Maintenance Charges or any other payment of the contractor and/or PBG retained by WBSEDCL.

27. Labour License:

Contractor will have to obtain Labour License if required, as per Contract Labour (Regulation & Abolition) Act, 1970 as early as possible.

28. Price:

Price should be fixed & firm in all respect and inclusive of all taxes, duties, levies, all incidental charges, if any (Except GST) and 10 years Comprehensive Maintenance etc. Goods & Service Tax (GST) as applicable will be paid extra during pendency of the contract. **No price escalation will be considered due to any reason what-so-ever within contract or extended time period, as the case maybe.**

Prices shall be quoted and payable in Indian Rupees only.

29. Payment:

Payments shall be released as per following schedule.

CFA of Rs 30,000/- per kWp will be disbursed directly to the EPC contractor from MNRE after successful commissioning on compliance of the OM 318/17/2024-GCRT(Part-15) Dated 06.10.2025.

Keeping 10% of contract value from the balance amount (SFA) as retention amount for (O&M) to be disbursed as per below table:

Sl. No.	Work Head	Pattern of release of payment
I	After supply & delivery of Solar PV Module and Inverter as per BOM at site/Turnkey contractor store for the individual solar PV system	70% of the cost of SFA based on discovered price for each system/plant to be released against submission of signed delivery chalan of authorized representative of WBSEDCL with make and Sl. No. of PV module and Inverter. Geo-tagged photograph of sites and consent from the house owner where the power plant will be installed shall be submitted.
II.	After successful Installation and commissioning of individual solar PV system	10% of the cost of SFA based on discovered price for each system/plant to be released after Joint Inspection & Necessary Certification / Acceptance at site.
III.	After handover of complete plant and materials to the respective /EPC Contractors/RTS vendors.	20% of the cost of SFA based on discovered price for each system/plant subject to submission of all requisite documents as in tender.
O&M Part		
I	Comprehensive Annual Maintenance for 10 (Ten) years including defect liability period.	10% of the contract value. The payment will be made on yearly basis @ 1% of the contract value subject to satisfactory performance and submission of maintenance report on regular basis as mentioned in the Tender.

The price of each system will be arrived multiplying the capacity of each system by the offered/order price per kWp.

The materials shall be delivered at site according to the Bill of Materials mentioned in the Tender Document.

The contractor shall submit Invoice in triplicate for releasing the payments.

WBSEDCL shall arrange joint inspection of work for payments. Minimum eligible bill amount will be 5% of the contract value (except the final retention bill and (O&M) period bills).

30. Statutory Deduction

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

31. Taxes, Duties, Levies:

- GST & Basic Customs duty (wherever applicable) shall be included in the bid price by the bidder.
- Bidders shall have to quote the GST component as applicable in the respective BOQs duly mentioning proper HSN & SAC code therein. Bidders shall have to ensure correct reflection of GST while quoting the price bid.
- In case of any change subsequently in GST including rates by the Government, LOA will be modified accordingly till the scheduled date of completion of the entire work.
- 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.
- Bidder shall furnish GST Registration number (GSTIN).

32. Handing Over:

The work will be taken over from the EPC contractor upon successful completion of all tasks to be performed at site(s) on equipment supplied, installed, erected and successfully commissioned by the contractor in presence of the representative of WBSEDCL and subsequently handed over to the EPC contractor for 10 years comprehensive (O&M). During handing over complete project work, the contractor shall submit the followings for considering final payment.

i. Completion Certificate including Warrantee Certificates of the work and materials in a Non-judicial Stamp Paper of Rs.100/- (pro-forma for the same should be approved by WBSEDCL) duly indemnified.
ii. Detailed Engineering Document with Detailed Specification, Bill of materials, Schematic Drawing, Test Results and Manuals for all deliverable major items.
iii. All as-built drawings, design and manual of the power plant in 03 (three) sets.
iv. Operation, Maintenance & Safety Instruction Manual and other required information about the project.
v. Insurance Document.

After submitting all the requisite documents as mentioned above, WBSEDCL will hand over the plant to the contractor for comprehensive operation and maintenance for 10 (Ten) years as per clause no. 25 of GCC.

33. Certificate of Completion of Works:

Controlling Officer will issue a Certificate of Completion before handing over the plant to the EPC contractor for commencement of 10 years of comprehensive (O&M) based on the following certifications:

i. Acceptable quality and workmanship of works.

ii. Acceptance of field tests by the Controlling Officer or his authorized representative after commissioning the plant.

34. End Users Training :

The Contractor will arrange for training at site for the end users. The contractor will provide training materials for the training programme. The training will be the part of contract and no extra cost will be provided for organizing the training programme.

35. Recovery against unused materials:

Recovery will be made from R/A Final bill as per prevailing rate of WBSEDCL of those materials remained unutilized against the approved Bill of Materials.

36. Final Acceptance Certificates (FAC):

The Controlling Officer will issue Final Acceptance Certificates (FAC) within 30 (Thirty) days from the date of completion of 10 years of comprehensive (O&M) or the date of rectification of deficiencies/damages/defects, if any, whichever is later.

SPECIAL CONDITIONS OF CONTRACT

(Section-IV)

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, Indian Electricity Rules, Safety Rules etc. 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.

1. 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

2. 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 issued by Tariff Advisory Committee (India).

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.

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 Pro-forma, 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 by way of suspension of work/termination of contract.

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

3. 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.

4. Packing:

The Contractor shall make separate package for each consignment and mark all containers with the implementing document number pertinent to the shipment, if required for maintenance of the plant. 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.

5. 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.

6. Accident Risk:

WBSEDCL 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.

7. 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 WBSEDCL as per norms.

8. 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.

9. Storage at Site:

The contractor shall provide necessary storage at respective /Institute 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.

10. 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.

11. 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 BOM.

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.

12. 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 qualified Engineers 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.

13. 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, lodging and fooding 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.

14. 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.

15. 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:

- The rates of all supplementary items shall be decided on pro-rata basis from the existing items in the contract.
- When above clause no 16.1 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.
- When clause no 16.1 & 16.2 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 EPC Contractors / RTS Vendors.

16. 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.

17. 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.

18. 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.

19. 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.

20. 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.

21. Clearing of 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.

TECHNICAL SPECIFICATION

(Section-V)

1. Outline of the Scheme of the Project:

a) Survey of the proposed sites and submission of technical feasibility report as per Annexure-XVI.

b) The PV array shall be installed at the suitable space of available roof area/Tin shed at individual project site having capacity of 1kW (AC).

   i) The power generated from PV array shall be fed to the MPPT Tracker of single Phase Grid-Tied Solar Inverters of 1kW nominal capacity with around AC:DC ratio of 1:1.2 shall be considered.

c) Each MPPT Trackers of the inverters shall be protected with inbuilt Type-II Surge Protection Device (SPD).

d) Separate Data logger with GSM Compatibility for transmitting Inverter and Meter data (if desired by WBSEDCL) shall be provided and installed at each site for real time data logging and monitoring of the generation. Suitable mobile app must be provided for Plant-wise generation monitoring. However the OEM of data logger (Common for all sites) must share the API and related support free of cost to make the integrated roof top solar generation available at ALDC, WBSEDCL. Selection of common OEM of data logger is in the discretion of WBSEDCL. All the Agencies shall have to take approval of the same.

e) Output from the Grid-tied Solar Inverter shall be fed to the supply mains of the consumer (connected with grid) through isolation facility.

f) Both the Generation and Consumer Meter shall be in the scope of the WBSEDCL. The meters shall be provided at the output feeder of Inverter to record the Solar PV Generation.

g) Earthing System (equipment and body earthing) with Lightning Arrestors shall be installed at the plant area as required. DC and AC earthing shall be separate.

h) Safety Sign as per relevant Indian Standard and Project Information Signage and Schematic Diagram as per approved design from WBSEDCL shall be installed at each site.

i) Necessary cleaning arrangement (plumbing system, hosepipe, wiper, bucket, mug, pump &tank if required etc.) shall be provided.

j) All necessary equipment's, cables, etc. except meter shall be in the scope of bidder up to evacuation point.

k) The installed Solar PV power plant should be Robust, Economic and Efficient.

l) 10 years Comprehensive O&M of all the plants shall be in the scope of the Bidder.

2. Submission of Detailed Design Report:

The contractor shall submit the Detailed Design Report for according approval from WBSEDCL. The Detailed Design Report shall contain but not limited to the following details:

i. Common technical particulars along with Single Line Diagram (SLD).
ii. Module Mounting Structure Details with Drawings and Design.
iii. Bill of Quantity (BOQ) and Detailed Time Schedule.
iv. Type Test Report and all other relevant certificates for various equipment's proposed to be used in the plants.

3. Minimum Guaranteed Generation:

The contractor shall submit a declaration for Minimum Guaranteed Generation as mentioned in clause no. 28 of ITB or individual site along with their Technical Bid.

As the Solar PV Power Plants will be Grid-connected type, Grid Outage will be considered for calculating minimum guaranteed generation. For accounting grid outage, operation time of the plant will be considered as 12 hours (06:00 am to 06:00 pm) every day for all over the year. In case of grid outage during that period, Minimum Guaranteed Generation will be relaxed proportionately. Necessary Data logging arrangement shall be provided by the contractor for continuous monitoring of the plant. No relaxation in minimum guaranteed generation will be considered for any other losses occurred in the system. The contractor shall submit the monthly generation report quarterly to WBSEDCL mentioning the accumulated generated energy for each month, period of grid outage and any other relevant details.

Failing to generate the minimum guaranteed generation, penalty as mentioned in GCC of this tender document will be imposed to the contractor.

4. System / Equipment Details:

A. SOLAR PHOTOVOLTAIC MODULES

A.1. Standards:

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

Sl. No.	Standard	Description
1	IEC: 61215/IS: 14286	Crystalline silicon terrestrial photovoltaic modules – Design qualification and type approval.
2	IEC: 61730 – Part 1	Photovoltaic (PV) module safety qualification – Requirements for construction.
3	IEC: 61730 – Part 2	Photovoltaic (PV) module safety qualification – Requirements for testing.
4	IEC: 61701/IS: 61701	Salt Mist Corrosion Testing of the module.
5	IEC: 62804	Test method for detection of Potential Induced Degradation of photovoltaic (PV) modules.
6	IEC 62716	Photovoltaic (PV) Modules – Ammonia (NH3) Corrosion Testing

The proposed PV Module must have the Test Certificate issued from accredited test laboratories of Ministry of New and Renewable Energy, Government of India.

Type test certificates issued from IEC accredited laboratories shall only be acceptable.

The manufacturers must be empaneled in the ALMM list I and II of MNRE, Govt. of India.

A.2. Identification and Traceability:

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

i. Name of the manufacturer of PV Module.
ii. Name of the Manufacturer of Solar cells.
iii. Month and year of the manufacture (separately for solar cells and module).
iv. Country of origin (separately for solar cells and module).
v. I-V curve for the module.
vi. Peak Wattage, I_m, V_m and Fill Factor for the module.
vii. Unique Serial No and Model No of the module.
viii. Date and year of obtaining IEC PV module qualification certificate.
ix. Name of the test lab issuing IEC certificate.
x. Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001.

RFID shall be placed inside or outside of each solar module laminate and must be capable to withstand environmental conditions as per latest Guideline of MNRE, Govt. of India.

A.3. Authorized Testing Laboratories/Centers:

PV modules must qualify (test reports / certificate from IEC / NABL accredited laboratory should be enclosed) as per the relevant IEC/IS standard. Additionally the performance of PV modules at STC conditions must be tested and approved by one of the IEC / NABL Accredited Testing Laboratories including Solar Energy Centre (SEC).

A.4. Warranty:

a. Material Warranty: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than ten (10) years from the date of sale to the original customer (i.e. EPC Contractor).

i. Defects and/or failures due to manufacturing
ii. Defects and/or failures due to quality of materials
iii. Non conformity to specifications due to faulty manufacturing and/or inspection processes.

If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owner's or WBSEDCL sole option. The contractor shall be responsible to contact with the contractor if any of the above mentioned cases occurred.

b. Performance Warranty: The manufacturer should warrant the output of Solar Module(s) with 1% degradation in the first year followed by 0.5% linear degradation for the remaining 29 years from the date of final commissioning. The contractor shall collect the Warranty Certificate for performance of the modules from the manufacturer and submit the same to WBSEDCL prior to delivery of the products to the respective sites.

c. If, Module(s) fail(s) to exhibit such power output in prescribed time span, the Contractor will bound to either deliver additional PV Module(s) to replace the missing power output with no change in area of site used or replace the PV Module(s) with no extra cost claimed at Owner's sole option.

Manufacturer of proposed PV modules must have the ISO 9001:2008 or ISO 14001 Certification for their manufacturing unit for their said manufacturing item.

A.5. Specification:

SI. No.	Item	Description
1	Type	TOPCon or any other Crystalline Silicon technology with higher efficiency
2	Origin	Modules must be Manufactured in India
3	Efficiency of module	Minimum 22 % at STC
4	Cell efficiency	Minimum 22 % at STC
5	Fill Factor	Minimum 78 %
6	No. of cells per module	144 (half cut)
7	Module Frame	Non-corrosive and electrolytically compatible with the structural material, preferably anodized Al.
8	Junction box	Thermo-plastic, IP 68, UV resistant
9	Blocking diodes	Schottky type
10	Bypass Diode	Yes, as required
11	Power Rating	The nominal power of a single PV module shall be 600 Wp or higher.

12	Power tolerance	upto +5W
13	Temperature co-efficient of power	Less than - 0.30% / °C
13	RF Identification tag for each solar module	Shall be provided inside or outside the module and must be able to withstand environmental conditions and last the lifetime of the solar module as per MNRE Norms.
14	Glass	High transmittance glass
15	Maximum System Voltage	1500V

A.6. Other General Requirements:

i. The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) percent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.

ii. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and minimum IP 67 rated.

A.7. Testing & Approval:

- The contractor shall submit requisite documents which must contain but not limited to the following details of the solar modules:
  - Detailed specifications, BOM and Necessary drawings;
  - Type test reports
  - Performance Certificate 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 Indian Standard shall be carried out at the module manufacturer's workshop. Following tests as per relevant Indian Standard shall be carried out on certain number of modules from a lot (decided by WBSEDCL) as acceptance tests of Solar PV Modules:
  - Visual Inspection
  - Performance Test of the modules at STC and NOCT with Sun Simulator of Class B or better as per Indian Standard
  - Performance Test of the modules at low irradiance (200 W/m^2) with Sun Simulator of Class B or better as per Indian Standard
  - Dielectric withstand test
  - Continuity and leakage current test
  - Insulation Resistant test
  - Wet leakage current test
  - Electroluminescence test
  - Mechanical load test
  - 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:
  - Guaranty or Warranty certificates.
  - Test reports of acceptance tests etc.
- The contractor shall deliver the product to the site only after receipt of despatch order in writing from WBSEDCL.

B. PV ARRAY

B.1. Specification:

Sl. No.	Item	Description
1	Maximum System Voltage	1500V
2	Type of Solar Modules	For installation of Solar PV Array in a site, modules having same capacity, rating / specification shall be used. Mixing of modules having different capacity, rating / specification will not be allowed.
3	PV Module Connector	IEC 62852 and for IP of connectors IEC 60529
4	PV Module interconnection cable and array cable	IS 17293
5	PV array String Voltage	As per MPPT range of inverter

C. PV ARRAY STRUCTURE

C.1. Standards:

Sl. No.	Standard	Description
1	IS 800, IS 801,IS 808 and IS 811	General constructions in steel- Code of Practice.
2	IS 456 and IS 1786	Plain & reinforced Concrete- Code of Practice.
3	IS 2062 and IS 2633	Hot rolled medium and high tensile structural steel specification.
4	IS 875 Part III and 1893 (latest edition)	Code of practice for design wind loads and seismic load for building and structures
5	IS 4759	hot-dip zinc coatings on structural steel and other allied products — specification

C.2. Designing of Module Mounting Structure (MMS):

During Structural design following points must be include but not limited to the following:

a. There must be sufficient gaps (As per design) between the rows of the panels and all precautions to be taken to avoid any shading on the panels.

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

c. The structure shall be designed to allow easy replacement of any module and shall be in line with site requirement.

d. The mounting structure shall be designed for simple mechanical and electrical installation. It shall support SPV modules at a given orientation, absorb and transfer the mechanical loads to the base properly.

e. The mounting steel structure shall be as per latest BIS 2062 (amended up to date).

f. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from SPV panels at the same time.

g. All fasteners shall be of stainless steel of grade SS 316.

h. The support structure & foundation shall be so designed to withstand wind load of the location as given in relevant Indian code for wind (IS 875 Part III, IS 1893 latest edition).

i. IS 800-2007 and IS 801 latest edition shall be followed for structural design. Accordingly STAAD Pro output of the design is to be submitted. Minimum thickness of vertical member and other member should be 3.15mm and 2.0mm respectively.

j. Galvanization of all the MS structural members shall conform to IS: 4759. The quality of zinc shall conform to IS: 209 and IS: 2629. All galvanized materials shall withstand tests as per IS: 2633. **Arrangement of testing shall be made by the contractor** at NABL LAB witness by WBSEDCL Engineers. Minimum galvanization of structural member should be 80 micron.

k. The bidder/manufacturer shall specify installation details of the PV modules and the support structures with appropriate diagram and drawings for approval.

l. All structures including any metallic part thereof must be protected against any corrosion. The structures must also be electrolytically compatible with the materials used in the module frame, fasteners, fixtures, nuts, bolts or any similar nature of metallic components whichever are required to complete the job.

m. Foundation should be of minimum 300mm dia and 400mm height. Foundation concrete of the structure should be of grade M20 and the mixture should not be lesser than 1:1.5:3. Cube test should be done from the institute approved by the Engineer in Charge. If finishing is not done properly then Neat cement finish should be made over the foundation concrete.

n. Foundation should be strong enough to withstand the uplift force due to wind load and seismic load and the same should be shown in design calculations.

o. Detailed engineering, drawings, specification and instructions for civil and other related structural works will be prepared by the Contractor/ architectural firm for erection and installation of the PV Array structure. Before execution of the same, Prior approval is to be taken from WBSEDCL.

p. Mounting structure shall be designed to satisfy all the safety requirement of the roof. For any special case or any different type of roof, the contractor may provide different type of mounting structure after getting approval from WBSEDCL.

q. The structural condition of the roof / type of roof / type of roof treatment (if any) should be precisely assessed by the contractor during site surveying and that should be clearly mentioned in the Detailed Project Report and accordingly type of structure should be selected.

r. The footing base of the structure should be painted by good quality (IS approved) water proofing bituminous paint.

s. No drilling of concrete roof shall be allowed.

t. All fastener bolts should be of minimum 16mm dia with minimum 80 micron galvanization.

u. For tin shed aluminum din rail too be installed.

D. GRID CONNECTED INVERTER

The power generated from PV array shall be fed to the MPPT Tracker of Three Phase Grid-Tied Solar Inverters of nominal cumulative capacity 1.0 kW.

D.1. Standards:

Sl. No.	Standard	Description
1	IEC/IS: 61683	Photovoltaic systems – Power Conditioners – Procedure for measuring efficiency
2	IEC 61000 Series	Electromagnetic compatibility (EMC)

3	IEC 60068	Environmental Testing
4	IEC 62116	Islanding Prevention Measurement
5	IEC 61727	Interfacing with utility grid
6	IEC 62109-I & II	Safety of power converters for use in photovoltaic power systems
Inverters must be IS: 16221 and IS:16169 certified. Inverters OEM must have ISO 9001 registration.		

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.

D.2. Specification:

Desired specification of each inverter shall include but not limited to the following:

SI. No.	Operating Parameter	Desired specification
1	Type	Grid connected Inverter/Micro Inverter
2	Input (DC)	
	PV array connectivity capacity	120% (Minimum)
	MPPT Voltage range	Compatible with the array voltage
3	Output (AC)	
	Nominal AC Power output	1.0 kW
	Phase	Single Phase
	Adjustable AC voltage range	The inverters shall continue generation for grid voltage variation from + 10 % to at least – 10 % of the rated system voltage.
	Frequency range	The inverters shall continue generation for grid frequency variation from + 5 % to – 5 % of the rated system frequency.
	THD	The limits on voltage harmonics are 5 % for THD and 3 % for any single harmonic. Current harmonics for various power output conditions shall be limited to 3%.
4	General Electrical data	
	Maximum Efficiency	98 % (minimum)
5	Protection	
	DC Side	Reverse-polarity, reverse current to PV array, over voltage, under voltage, over current
	AC side	Over voltage and under voltage, over current, over and under grid frequency, ground fault
	Earthing	Provision of Body Earthing
	Surge Protection	Type-III AC & DC Surge arrestors

6	LCD Display Parameters(for String Inverter only)	
	General	Unit Temperature
	DC	Voltage, Current, Power
	On grid connected mode	Line status, Grid voltage, Grid frequency, Export Power, Cumulative Export Energy
7	Switching Devices	IGBT
8	Interface (Communication protocol) (for String Inverter only)	RS485-Modbus, RS-232 for serial data communication port must be provided in the inverter for onsite dumping data from the memory, web based remote monitoring system. Bluetooth communication must be present for software update at site and synchronisation with mobile phone for operation monitoring.
9	Web monitoring	Inverter OEM shall provide all necessary data and access for interfacing with the 3rd party unified web and application based monitoring system for the whole NIeT.
10	Storage of Data	Inbuilt data logger with at least 10 years storage facility
11	Mechanical Data	
	Protection Class	IP 65 or higher
	Cooling	Aluminium Die cast enclosure preferably with forced air cooling.
12	Warranty	10 Years
13	Testing facility	Inverters OEM shall have their own testing facility at the manufacturing premises in India.
14	Service Centre	Registered Service Center in West Bengal

D.3. Testing and Approval:

- The contractor shall submit requisite documents which must contain but not limited to the following details of the solar inverter:
  - Detailed specifications, BOM and Necessary drawings;
  - Type test reports
  - Performance Certificate 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 Inverter 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 along with EMC filters availability verification.
  - Performance Test and measurement of AC & DC parameters
  - DC reverse polarity protection
  - Anti-islanding Protection
  - Over Voltage & Under Voltage Test
  - Over Frequency & Under Frequency Test
  - Night consumption Test
  - Measurement of Efficiency and THD
  - BOM validation

- 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:
  - Warranty Certificate
  - Test reports of acceptance tests etc.
- The contractor shall deliver the product to the site only after receipt of such approval against their prayer in writing from WBSEDCL.

E. REMOTE MONITORING SYSTEM (RMS)

The RMS shall be web and application-based monitoring system with data logger at site for logging and transmitting of data to the centralised cloud server of the RMS OEM. The RMS OEM shall be a third-party single OEM for the whole project irrespective of the inverter make of all sites, for maintaining a unified portal solution and ease of monitoring of all the solar power plants of the project distributed throughout the West Bengal State.

It operates on the principle of collecting data through communication ports like RS485 and Ethernet by using the transfer media as wired or wireless. The collected data is processed to generate the required parameters and in the required formats as approved by WBSEDCL. Also, data logger must store all the essential logs for future reference and sends to the cloud-based portal for remote access and monitoring. Centralised cumulative data for all the sites shall be integrated (MW & MWH for each 15 minutes block) to the SCADA system of ALDC, WBSEDCL. Necessary cost for such arrangement regarding license, integration etc to be borne proportionately by the EPC Contractors / RTS Vendors.

Hence, monitoring and downloading of the complete data set can be done remotely from anywhere, anytime when internet connection is available. The RMS must have the following features:

a) Only Indian OEM shall be used.

b) Data logger and Ethernet gateway shall be inbuilt.

c) The OEM shall have post sales service facility in West Bengal.

d) Centralised dash board for all the sites.

e) Data transfer facility to other server through FTP & API credentials.

f) Raw data from solar PV power plant Inverter shall be presented into informative Graphs & Charts. GUI as approved by WBSEDCL shall be monitored through Application and web based monitoring facility.

g) Master – Slave Communication facility.

h) Compatible with multiple inverters makes.

i) Real time monitoring facility.

j) Convenience of performance analysis and fault diagnosis using the following parameters:

- Solar Power, Daily energy, total energy, monthly and yearly energy, CUF, etc.
- Graphical and tabular both views are available on portal with download option.
- Daily alert messages and mails of Generation Data.

The power supply for operating the data logger is in the scope of bidder.

E.1. Features:

Sl. No.	Specification	Requirement
1	Reset Switch , LED , Power Supply , RTC , GSM , Local monitor , Remote Monitor	Yes
2	RS-485 Ports	2 No's
3	USB	1 No's
4	Ethernet	1
5	Number of Inverters to be integrated	Max 2
6	Number of energy meters	Up to 3
7	Internal Storage Of Chip	Up to 4 GB
8	Data logger Enclosure	IP67 above
9	Surge Protection	Both Power & Communication SPD
10	Power Backup (UPS)	12V, Min 2 Hrs. Backup, Li-ion battery, min 3 nos. of cells

E.2. Port Specification and Application:

Sl. No.	Ports & Interface	Specifications	Application
1	RS-485-1	Baud rate : 4800,9000,19200 Parity : Odd , Even, None ID: 1-255	MFM & Sensor
2	RS-485-2	Baud rate : 4800,9000,19200 Parity : Odd , Even, None ID: 1-255	Inverter
3	Ethernet	10 Mbps	For LAN & Internet
4	GSM / GPRS	4G SIM (Default)	Remote Cloud Interface
5	LED	3 mm Dual color	HB , Status , GSM

E.3. Other Technical Details:

Sl. No.	Technical Points		Description
1	Data uploading frequency (Selectable)		5 Min (default), 1/5/10/15/30 min
2	GSM / GPRS		Available
3	Master – Slave Communication method (As Slave)		Wired , Wireless , PLCC , OFC
4	Power supply (SMPS)	Input	110-260 VAC , 50/60 Hz
		Output	External Plug – 10 to 28 VDC/2A
5	Ambient Temperature		-20°C to +60°C
6	Operating Temperature		-20°C to +70°C
7	Storage Temperature		-20°C to +70°C
8	Relative Air Humidity		5%- 10% , non-Condensing
9	Protection mode (Ingress Protection), installation type		IP- 32, Indoor-Din Rail/wall mount
10	Local Storage		Max 6 Months
11	Warranty		5 years
12	Device Compatibility		Multiple makes having Modbus Protocol

E.4. Certifications:

Sl. No.	Test Description	Test Standard
1.	ESD	IEC 61326-1
2.	EFT/B	IEC 61326-1
3.	EFT/B (on signal/control/port)	IEC 61326-1
4.	Surge	IEC 61326-1
5.	EMI/ EMC	IEC 61326-1 , IEC 61000-6-4 , IEC 61000-4-3
6.	Environmental testing	IEC 60068-2-2
7.	Cold test	IEC 60068-2-1
8.	Change of temperature	IEC 60068-2-14
9.	Damp heat cyclic	IEC 60068-2-30
10.	Shock testing	IEC 60068-2-6
11.	Vibration testing	IEC 60068-2-27
12	Conducted Emission	EN IEC 62040-2 : 2018
13	Conducted Susceptibility	EN IEC 62040-2 : 2013
14	EPT and Brust	EN IEC 62040-2 : 2018
15	Electrostatic Discharge	EN IEC 62040-2 : 2018 EN IEC 62040-2 : 2018
16	Surge	EN IEC 62040-2 : 2018

The data logger shall have reliable battery backup and data storage capacity (min. 6months data) to record all sorts of data simultaneously round the clock. All data shall be recorded chronologically.

Network Connection:

For data logging and remote monitoring through application and Web based for all the SPV power plants, the contractor shall procure SIM for getting internet facility at each site. In order to get reliable network connection, selection of network provider shall be made after discussing and according approval from WBSEDCL. The connection may be takenin the name of the contractor. So rental charges associated with the connection shall be borne by the contractor for the whole period of operation and maintenance (10 years). Neither WBSEDCL nor the building authority shall be liable to pay any charges for this system for 10 years of operation and maintenance period.

The contractor will be liable for any kind of maintenance (including replacement of parts) of the remote monitoring system for 10 years of operation and maintenance. Failing which, penalty as mentioned in GCC of this tender document will be imposed.

F. ENERGY METER

WBSEDCL will provide Export Import Energy Meter or Net Meter and generation meter at each location. The contractor should submit Detailed Time Schedule mentioning Name and Address of the Sites, expected commissioning date for each site in a table format.

G. INTEGRATION OF PV POWER WITH GRID

After synchronization, AC power from the inverter shall be fed to the main electricity grid through Electricity Distribution Box of respective site installed near the Grid Coupling Point.

H. CABLES & WIRING

H.1. Specification:

SI. No.	Item	Description
A	DC Cable	
	Conductor	Tinned annealed stranded flexible copper according to IEC 60228 class 5
	Standard	IS 17293
B	AC Cable	
	Rated Voltage	1.1 kV
	Type	2 core, Armoured of suitable rating
	Conductor	Stranded flexible copper
	Insulation	XLPE
	Standard	IS: 7098-I
C	PVC Conduit tees, bends etc. (Hard & flexible)	
	Standard	ASTM D 1785 u PVC
	Ambient Temperature	0^0 C to 50^0 C
	Type	UV Stabilized, Temperatures, Shock Proof, Chemical Resistant

H.2. Guideline for Installation:

i. For installation of DC Cables, sufficient gaps shall be provided in between the module connectors and the module mounting structure.

ii. All AC cables must be armoured.

iii. Cable terminations shall be made with suitable cable lugs & sockets etc, crimped properly and cables shall be provided with dry type compression glands wherever they enter junction boxes / panels / enclosures at the entry & exit point of the cubicles. The panel bottoms should be properly sealed to prevent entry of snakes / lizard / insects etc. inside the panel. All cables shall be adequately supported. Outside of the terminals / panels / enclosures, shall be protected by conduits. Cables and wire connections shall be soldered, crimp-on type or thimble or bottle type.

iv. Only terminal cable joints will be accepted.

v. All cable / wires / control cable shall be marked with good quality letter and number ferrules of proper sizes so that the cables can be identified easily.

vi. All cable shall be suitably marked or coded for easy identification. Cables and wires shall confirm to the relevant standards suppliers to specify the specification.

vii. Minimum two (02) number loop must be provided at the start and end each span of cable laying. Loop length shall be as per relevant Indian Standard.

I. PROTECTION SYSTEM

I.1. Lightning Protection:

The SPV power plants shall be provided with lightning protection using LA and Earthing using Copper Bonded Rod of 250-micron coating & 3m length and diameter as per design requirement. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC: 62305. The protection against induced high-voltages shall be provided by the use of Surge protection devices (SPDs) and suitable earthing such that induced transients find an alternate route to earth.

I.2. Surge Protection:

Internal surge protection shall consist of three surge-arrestors connected from +ve and –ve terminals to earth (via Y arrangement) / SPDs.

I.3. Earthing Protection:

a. Earthing System shall connect all non-current carrying metal receptacles, electrical boxes, appliance frames, chassis and PV module mounting structures in one long run. The earth strips should not be bolted or interrupted. Earthing GI strips shall be interconnected by proper welding.

b. The complete earthing system shall be electrically connected to provide return to earth from all equipment independent of mechanical connection.

c. The equipment grounding wire shall be connected to earth strip by proper fixing arrangement. The earth strip shall be continued upto at least 500 mm from the equipment's.

d. Earthing system design should be as per the standard practices and should conform to the latest edition of IS 3043.

e. Necessary provision shall be made at bolt isolating joints of each earthing pit for periodic checking of earth resistance. An earth bus and a test point shall be provided inside control room. Test point shall also be provided at each earth pit.

f. Minimum Three (03) numbers of interconnected earth pit needs to be provided in each location. Minimum required gap shall be provided in between earth pits as per relevant standard. Body earthing shall be provided in Inverter, each panel, module mounting structure and in any other item as required.

g. Earthing system must be interconnected through GI Strip to arrive equipotential bonding. The size of the GI earth strip must be minimum 25 mm X 3 mm.

I.4. Grid Islanding:

In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.

J. PROVISION FOR MODULE CLEANING

Necessary equipment's and water supply lines are to be provided with suitable number of outlets in the array field to facilitate easy cleaning of the PV Modules. Plumbing arrangement should be provided at each location. Hosepipe of min. 15 m length, bucket, mug, wiper (2 nos.) shall be supplied at each site by the contractor for cleaning of solar modules.

K. FIRE EXTINGUISHERS

Suitable numbers of 6 kg ABC type dry power portable fire extinguishers shall be provided at each location as approved by WBSEDCL depending upon the SPV plant capacity. The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards.

Standards:

Fire Extinguisher	IS 13849 (with latest amendments)
Fire Bucket	IS 2546 (with latest amendments)

L. SIGN BOARDS

Project information Signage:

For signage, retro reflective water resistant, anti-corrosive paint shall be used over permanent suitable back sheet. The sheet shall be rigidly fixed on a FRP made sheet of minimum 5 mm thickness. Size of the signage shall be minimum 3' x 2'. The whole set including the designing of the signage shall be approved by WBSEDCL.

Safety Sign:

Safety Sign must be provided mentioning the level and type of voltage and symbols as per Indian Electricity Rule at different places of a site as may be required.

M. SAFETY MEASURES:

The bidder shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA guidelines etc

FORMS

(Section-VI)

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	Tender Fee (Scanned copy)	Drafts	Statutory cover (Technical proposal)	
2	Earnest Money Deposit (Scanned copy)	Drafts	Statutory cover (Technical proposal)	
3	Application for Tender (Annexure – I)	Annexures	Statutory cover (Technical proposal)	
4	Notice Inviting Tender	NIT	Statutory cover (Technical proposal)	
5	Addenda / corrigenda , if published	NIT	Statutory cover (Technical proposal)	
6	Check List (Form – I)	Forms	Statutory cover (Technical proposal)	
7	Pro-forma for undertaking to be submitted by the Bidders (Form – IV)	Forms	Statutory cover (Technical proposal)	
8	Format of Letter of Bid(Form – V)	Forms	Statutory cover (Technical proposal)	
9	Summary statement of average annual turnover (Form – II)	Forms	Statutory cover (Technical proposal)	
10	Statement of orders executed (Form – III)	Forms	Statutory cover (Technical proposal)	
11	Proof of Company Incorporation / Trade Licence	Company Details	Non-Statutory cover (Technical proposal)	
12	PAN Card details	Certificates	Non-Statutory cover (Technical proposal)	
13	Current Professional Tax clearance certificate and VAT/CST registration certificate	Certificates	Non-Statutory cover (Technical proposal)	
14	Service Tax, PF registration certificate/current challan	Certificates	Non-Statutory cover (Technical proposal)	
15	Exemption Certificate, if any, issued by any competent authority	Certificates	Non-Statutory cover (Technical proposal)	
16	Income Tax return for the last 03 (three) Assessment Years	Financial Info	Non-Statutory cover (Technical proposal)	
17	Evidence of Access to or Availability of Credit/Facilities (Annexure – III)	Financial Info	Non-Statutory cover (Technical proposal)	

Sl. No.	Scanned Copy of Documents to be uploaded	Name of folder	To be submitted in cover	Submitted (Y/N)
18	Order(s)/Contract Agreement(s) issued by the purchaser, Completion Certificates, Commissioning Reports signed by the purchaser/ordering authority to substantiate timely completion of the work	Credential	Non-Statutory cover (Technical proposal)	
19	List of Orders in hand	Declaration	Non-Statutory cover (Technical proposal)	
20	Minimum Guaranteed Generation (Vide Annexure – IV)	Declaration	Non-Statutory cover (Technical proposal)	
21	Bill of Material (Vide Annexure – V)	Declaration	Non-Statutory cover (Technical proposal)	
22	Others: Any other documents found necessary	Declaration	Non-Statutory cover (Technical proposal)	
23	BOQ vide Annexure –II (Proforma: PRICE BID)	Bill of Quantities (BOQ)	Financial Proposal	

SIGNATURE OF THE TENDERER WITH OFFICE SEAL

Form – II

CERTIFICATE REGARDING SUMMARY STATEMENT OF YEARLY TURNOVER

This is to certify that the following statement is the summary of the audited Balance Sheet arrived in favour of . . . . . for the three consecutive years or for such period since inception of the Firm, if it was set in less than such three year's period.

Sl. No.	Financial		Remarks
	Year	Turnover rounded up to in lakh (two digit after decimal)	
1.	2023-24		
2.	2024-25		
3.	2025-26		
Total			

Average Turnover (In lakh):

Note:

1. Average turnover is to be expressed in lakh of rupees, rounded up to two digits after decimal.
2. Average turnover for 3 years is to be obtained by dividing the total turnover by 3.0. If the Firm was set up in less than 3 year's period, consider the turnover for the period from inception to the Year-1. It may be either 1.0 or 2.0. Average turnover is to be obtained by dividing the total turnover by 1.0 or 2.0, as the case may be.
3. In case, the firm was set up in less than 3 year's period, mention the year of inception in the 'Remarks' column.

……

SIGNATURE OF THE TENDERER WITH OFFICE SEAL

Form – III

STATEMENT OF ORDERS EXECUTED DURING LAST THREE FINANCIAL YEARS

Sl. No.	Name of the Installed Plants/ Project	Financial year	Order No. and date	Name of Owner / order issuing authority	Quantity ordered	Ordered value/ Time (extended time, if any) of Completion	Quantity installed	Performance report of installed systems (scanned copy of certificate to be submitted)	Remarks

……

SIGNATURE OF THE TENDERER WITH OFFICE SEAL

Form – IV

PROFORMA FOR UNDERTAKING TO BE SUBMITTED BY THE BIDDER

(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 Notice No. ---------- dated ----------
2. None of the Partners of our firm is relative of employee of West Bengal State Electricity Distribution Company Limited.
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.

Dated----------

SIGNATURE OF THE TENDERER WITH SEAL

Form – V

FORMAT OF LETTER OF BID

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

To,
The Tender Committee,

Sub: Letter of Bid for the work----------

Ref: 1. NIT No ---------- dated ----------
2. Tender Id No. ----------

Dear Sir,

We offer to execute the work as per our offered quantity 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**

ANNEXURE

(Section-VII)

ANNEXURE – I

APPLICATION FOR TENDER

To
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.

NIT No: -

Dear Sir,

Having examined the Statutory, Non-statutory & NIT 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 _____ 20___
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

ANNEXURE –II

PROFORMA: – PRICE BID

(To be completed & submitted with the Financial Proposal)

NIT No:

Design, Engineering, Supply, Installation,Testing and Commissioning of Grid-Connected Rooftop Solar Plants of 1.0 kWp capacity each for 1,00,000 consumers through Gross Metering, including Comprehensive Operation & Maintenance, for 10 years through competitive bidding under the Utility Led Aggregation (CAPEX) Mode under PM- Surya Ghar: Muft Bijli Yojana in West Bengal

Description	Total Tendered Quantity	Offered Rate per kWp (in Rs.)	Total Offered Amount(in Rs.)
Design, Engineering, Supply, Installation,Testing and Commissioning of Grid-Connected Rooftop Solar Plants of 1.0 kWp capacity each for 1,00,000 consumers through Gross Metering, including Comprehensive Operation & Maintenance, for 10 years through competitive bidding under the Utility Led Aggregation (CAPEX) Mode under PM- Surya Ghar: Muft Bijli Yojana in West Bengal	1,00,000 KWp	**NOT TO BE QUOTED HERE**	**NOT TO BE QUOTED HERE**

SIGNATURE OF THE TENDERER WITH OFFICE SEAL

ANNEXURE –III

PROFORMA FOR 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……...
	Fund Based		
	Non-Fund Based		

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

Name of Bank …….....

Name of authorized Signatory …….....

Designation …….....

Phone No …….....

Address …….....

SEAL OF THE BANK

ANNEXURE – IV

DECLARATION SHEET
(FOR MINIMUM GUARANTEED GENERATION)

We .....…..……..…… declare that each 1 kWp Grid Connected Rooftop Solar PV Plant offered by us within the scope of this tender, will generate minimum Unit/year as per clause no 28 MGG of ITB according to applicable packages (applied packages) as-measured in the generation Meter. The Minimum Guaranteed Generation shall be reduced @ 0.8% per year.

In case we fail to produce the minimum guaranteed generation as stated above, the provisions of penalty according to Clause No. 24 of the General Conditions of Contract of this tender shall be applicable.

I hereby certify that I am duly authorized representative of the Bidder whose name appears above my signature.

Bidder's Name : …….....

Authorised Representative's Signature…….

ANNEXURE – V

BILL OF MATERIAL

(Individual SPV Plant/site wise)

Name of the Work: Design, Engineering, Supply, Installation,Testing and Commissioning of Grid-Connected Rooftop Solar Plants of 1.0 kWp capacity each for 1,00,000 consumers through Gross Metering, including Comprehensive Operation & Maintenance, for 10 years through competitive bidding under the Utility Led Aggregation (CAPEX) Mode under PM- Surya Ghar: Muft Bijli Yojana in West Bengal

Sl. No.	Items	Unit	Quantity	Description
1	Solar Photovoltaic Modules and PV Array as per Technical Specification	kWp	(minimum)	
2	Module Mounting Structure as per Technical Specification	Set	1	
3	Grid Connected Three Phase 1.0 kW Inverter as per Technical Specification.	Set	1	
4	Unified Remote Monitoring System as per Technical Specification	Set	1	
5	Lightning Protection and Earthing System as per Technical Specification	Set	1	
6	Any other Items required for commissioning of the complete project	Set	1	

Note: The bidder should upload the filled-up Bill of Material with their Technical Bid. Non-submission of this document will cause rejection of the tender.

ANNEXURE – VI

PROFORMA OF BANK GUARANTEE FOR BID GUARANTEE/EARNEST MONEY

Ref..... **Bank Guarantee No…….....**

Date…….....

To
The ……..
……..
……
West Bengal

Dear Sirs,

In accordance with Invitation to your 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 and including (*)……...
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)

(*) This date shall be 90 days after the last date for which the bid is valid.

ANNEXURE –VII

PROFORMA OF BANK GUARANTEE FOR CONTRACT PERFORMANCE

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

Ref.....

Bank Guarantee No..... Date:.....

To

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.

Dear Sirs,

In consideration of West Bengal State Electricity Distribution Company Limited, (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 equivalent to Rs..... (.....in words.....) being (10%) (ten percent) of the said value of the Contract 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 for bear 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 not withstanding 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)	(Name)
.....	.....…….....
(Official Address)	(Official Address)

Attorney as per Power

Of Attorney No.....

Date.....

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

** Upto 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 Contract Price.

   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.

ANNEXURE –VIII

PROFORMA OF 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……. (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	WBSEDCL
1).....	1) .....
Witness	Witness
2).....	2) .....
Witness	Witness

ANNEXURE –IX

PROFORMA OF INDEMNITY BOND

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

BY THE PRESENT INDEMNITY BOARD EXECUTED by me/us on this ……..Day of ……20……., I/We having Registered Office/residing at …….. (herein after called "OBLIGOR/OBLIGORS" which expression shall mean and includes my/our successors legal representatives, assigns) do hereby binds myself/ourselves and also our company/firm……. after having the power to bind so with the promise and undertaking in favour of the West Bengal State Electricity Distribution Company Limited a government company within the meaning of Sec.617 of the Company's Act, 1956 having registered office at VidyutBhavan, 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 to execute the job/works 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 the said job/works will be/likely to be done in places covered under Employees' State Insurance Act (ESI) and/or the Employee Compensation Act, 1923 (W.C. Act) and/or other laws relating to the Labour Management and Welfare.

And whereas according to the condition of the contract the OBLIGOR/OBLIGORS is/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 I/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 or to the satisfaction of the OBLIGREE 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 further undertakes/undertake to engage only those labour, worker, or any other personnel, whether skilled or unskilled, whether in technical, managerial or non-managerial or any other capacity in the area NOT covered under Employees' State Insurance Act 1948, who has life insurance for the sum assured equivalent to the amount of Compensation under the Employees Compensation Act in case of accidental death or inquiry and such insurance has been effected by the OBLIGOR/OBLIGORS.

5. 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.
6. 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.
7. THAT, if during the course of execution of work as stated in the letter mentioned hereinabove issued by the OBLIGEE, it is found that the OBLIGOR/OBLIGORS has/have not complied with guidelines/formalities within the meaning of Employees' State Insurance Act or Employee Compensation Act or any other laws relating to the Labour Welfare for the time being in force, and also has not observed the safety norms in accordance with the law to the satisfaction of the OBLIGEE, the OBLIGEE shall have the right to stop the execution of work/job and the period of such stoppage shall continue till adequate safety and other compliance mentioned hereinabove under the labour welfare legislation have been observed and such period of stoppage shall not be taken into account for the calculation of the total period of completion of work for which the OBLIGOR/OBLIGORS is responsible to complete the work/job and it will be deemed that discontinuance was due to default of OBLIGOR/OBLIGORS.
8. THAT, if at any time, due to exigency, the OBLIGEE i.e. the West Bengal State Electricity Distribution Company Limited (WBSEDCL) as the Principal Employer, becomes liable to pay any such compensation mentioned hereinabove, whether on failure of the OBLIGOR/OBLIGORS or for any other reason, the OBLIGEE shall have the right to recover the said amount from any amount receivable by OBLIGOR/OBLIGORS or any bank guarantee deposited or anything payable whether in connection with this contract or other contract by the OBLIGEE to the OBLIGOR/OBLIGORS.
9. THAT the OBLIGOR/OBLIGATOR 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/OBLIGATOR.

SIGNED AND DELIVERED

BY THE OBLIGOR/OBLIGORS .....

Signature .....

WITNESS:

1) Name & Designation .....
   Signature .....
1) Name & Designation .....
   Signature .....

ANNEXURE –X

PROFORMA FOR EXTENSION OF BANK GUARANTEE

Ref..... Date.....

To

……

……

……

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.

Annexure-XI

JOINT COMMISSIONING CUM HANDING OVER TAKE OVER CERTIFICATE

This is to certify that M/S ----------have installed ---------- kWp SPV power plant system at ----------. The system was commissioned successfully on dated. ----------. Now the power plant is running satisfactorily and handed over to M/s ---------- for 5 years comprehensive (O&M).

1. Place of installation: -

2. Department Name: -

3. Zone:

4. SPV module Make & Sl no

5. Make and Sl no of the PCU

6. Make and Sl no of the RMS along with Network SIM details.

7. Make and Sl no of the Meters

Signature with Seal

M/S ----------

Signature with Seal

Representative of WBSEDCL

Handed over to the ----------

Annexure- XII

BRIEF VENDOR PROFILE

1. Name of the Firm/Company

2. Year Established

3. Address of Office

4. Telephone No.

5. Fax No.

6. E-mail Address

7. Website

8. Sectors' in which the company/firm has successfully commission SPV power plant against the work order of Govt./ PSU/ Agencies in India

9. No. of full time personnel currently under employment

10. No. of years of proven experience of providing similar Services

11. Certifications (ISO 9001:2000, if any)

Authorized Signatory (Company Seal)

Annexure- XIII

PROFILES OF PROJECTS COMPLETED

1. Name of client

2. Name of the Project

3. Brief Description of the Project

4. Scope of the Project (Activities Involved)

5. Details of Solution and Methodology Adopted

6. No. of Locations at which Project is being/was implemented

7. Value of the project (INR)

8. Date of award of contract

9. Date of commencement of the project

10. Date of successful completion of the project

11. If not completed, expected date of completion

12. Name of the person who can be referred to from Clients' side, with Name, Designation, Postal address, Contact phone, FAX number, e-mail id etc.

Attach Additional Sheets and Annexure, if required.

Authorized Signatory (Company Seal)

Annexure- XIV

SATISFACTORY OPERATION OF SOLAR PV PLANT

(On Plant Owner's Letter Head)

Date: __//_____

TOWHOMSOEVER ITMAYCONCERN

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.

Regards,

Signature & SEAL of Authorized Person

Annexure XV

(On the Bidder's Letterhead)

Declaration of not being blacklisted/Debarred/Put on Holiday list

Certified that our Company, M/s .....is not blacklisted/ debarred/ suspended or put on holiday list by any Statutory/Regulatory/ Government Authorities / State Electricity Utility/ PSU in India.

It is certified that the information furnished above is true to the best of my knowledge and belief.

Bidders Name:

Signature of the Tenderer:

Designation:

Seal of the Company

Date:

Annexure XVI

(On the Bidder's Letterhead)

Self-declaration by Proprietor of the Bidding Company for not being blacklisted/Debarred/Put On Holiday list

I hereby confirm and declare that, none of the other concerns of which I am a Proprietor /Managing Partner are blacklisted/ debarred/ suspended or put on holiday list by any Statutory/ Regulatory/Government Authorities/State Electricity Utility/PSU in India.

It is certified that the information furnished above is true to the best of my knowledge and belief.

Signature of the Proprietor:

Name

Designation:

Seal of the Company:

Date:

Annexure_XVII

(On the Bidder's Letterhead)

Declaration regarding no litigation against WBSEDCL

We hereby declare that, no legal litigation/arbitration is pending/ongoing against WBSEDCL in any court/Forum against/by the bidder or its sister concern/Director/Partner/Proprietor.

If it is found at any stage of tendering, our offer will be rejected and I/We don't have any objection on the same.

Bidder's Name:

Signature of the Tenderer :

Designation:

Seal of the Company

Date: