NIeT No: WBSEDCL/SPGD/200 MW/Solar Park/2020-21/NIT-18

Date: 29.04.2020

TENDER DOCUMENT

For

Geo Technical Investigation & Measurement of Earth resistivity at the proposed 200MW(125 MW in 1st Phase & 75 MW in 2nd Phase) Solar Park Project site located under Block Ramnagar-II,District -Purba Medinipur,West Bengal



WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED

(A Govt. of West Bengal Enterprise)

VIDYUT BHAVAN, BLOCK – DJ, SECTOR – II SALT

LAKE, KOLKATA – 700 091

BID DETAILS

Sl. No.	ITEM	DETAILS				
1	NIT No.	WBSEDCL/SPGD/200 MW Solar Park/2020-21/NIT-18 dt. 23.04.2020				
2	Name of work	Geo Technical Investigation & Measurement of Earth resistivity at the proposed 200MW(125 MW in 1st Phase & 75 MW in 2nd Phase) Solar Park Project site located under Block Ramnagar-II,District -Purba Medinipur,West Bengal				
3	Tender Fee (Non-refundable) [In the form of Demand Draft/Banker's Cheque]	Rs. 2,300/- plus GST@18%(Total Rs. 2,714/-(Rupees Two thousand seven hundred forteen only)				
4	Estimated Cost of the Project	Rs. 23,00,000 (Rs. Tweny three lakhs only)				
5	Earnest Money (In the form of Bank Guarantee/ Demand Draft/Banker's Cheque)	Rs. 46,000/- (Rupees Forty six Thousand Only)				
6	Validity of Earnest Money (in case of Bank Guarantee)	06 (six) months from the date of opening of Bid and with a claim period of another 03 (three) months				
7	Date of uploading of NIeT Documents (Online)	04/29/20				
8	Document download start date (Online)	29//04/2020 (After Uploading of NIT Document)				
9	Last Date of submission of queries, if any, for the pre-bid meeting (Only through email)	11/05/2020 upto 12:00 hrs.				

	1	,
10	Pre Bid Meeting (Date & Venue)	11/05/2020 at 14:00 hrs at the Office of the Chief Engineer, Solar Power Generation Department (SPGD) 5th Floor, B Block, Vidyut Bhavan, WBSEDCL Block – DJ, Sector-II, Salt Lake, Kolkata – 700091
11	Bid proposal submission start date (Online)	11/05/2020 from 12:00 hrs
13	Last date & time for submission of bid (Online)	18/05/2020 upto 12:00 hrs
14	Date of Submission of original copies of Earnest Money Deposit and Cost of tender document (Manual Submission)	17/05/2020 at Solar Power Generation Department (SPGD), B - Block, 5th Floor, Vidyut Bhavan, WBSEDCL Block – DJ, Sector-II, Salt Lake, Kolkata – 700091
15	Date and time of opening of Bid (online)	18/05/2020 at 12:00 hrs
16	Time of completion of work	Field execution- by 12.06.2020 & Report submission 30.06.2020
17	Validity of offer	180 (One Hundred and Eighty) days (or within such extended period as may be, if required) from the date of opening of Bid.

PROJECT DETAILS

Details of L	ocation:	
1	Location	Location-Mandarmani in Mouzas Dadanpatrabar,Mania & Dakshin Purusottamour under Ramnagar-II Block
2	District	Purba Medinipur
3	State	West Bengal
6	Nearest Railway Station	Contai
Details of Plant: Geo technical Investigation Earth resistivity measurement at the proposed 200 MW Solar Park Project(125 MW in phase- 1 and 75 MW in phase-2)		&



West Bengal State Electricity Distribution Company Limited

(A Government of West Bengal Enterprise)

Solar Power Generation Department

Vidyut Bhavan (5th Floor, Block-B), Bidhannagar, Block DJ, Sector-II, Kolkata-700091 Phone: +913323197784 / +913323197484, Fax: 033-2321 2584

Website: www.wbsedcl.in, e-mail: solarwbsedcl@gmail.com, CIN: U40109WB2007SGC113473

Ref: NIT No. WBSEDCL/SPGD/200 MW Solar Park/2020-21/NIT-18 dt. 23.04.2020

NOTICE INVITING e-TENDER

West Bengal State Electricity Distribution Company Limited (WBSEDCL) intends to prepare report on Geo Technical Investigation & Measurement of Earth resistivity at the proposed 200MW(125 MW in 1st Phase & 75 MW in 2nd Phase) Solar Park Project site located under Block Ramnagar-II, District -Purba Medinipur, West Bengaltender document.

Schedule of Dates for e-Tendering:

Sl. No.	Activity	Date & Time		
1	Publishing Date	04/29/20		
2	Document Download start date	29/04/2020(After Uploading of NIT Document)		
3	Date of Pre-bid Meeting	11/05/2020at 14:00 hrs.		
4	Start date of Bid submission	12/05/2020 at 12:00 hrs.		
5	End date of Bid submission	18/05/2020 at 12:00 hrs.		
6	Date of physical submission of Tender Fee and EMD	04/05/20120 to 11/05/2020 between 11:00 hrs 16:00 hrs (Except Holidays).		
7	Bid opening date	18/05/2020 at 13:00 hrs.		

Intending bidders desirous of participating in the tender are to log on to the website https://wbtenders.gov.in for the tender. The tender can be searched by typing WBSEDCL in the search engine provided in the website.

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".

The work must be completed within 30.06.2020. A time schedule proposing project implementation plan is required to be provided by the bidder with their bid.

Validity of offer should be 180 days (or within such extended period as may be, if required) from the date of opening of Financial/Price Bid.

The bid document will be uploaded in https://wbtenders.gov.in on 29/04/2020. The intending bidders may download the Tender Document from the above said website directly with the help of Digital Signature Certificate.

The cost of the bidding document will be Rs. 2,300.00+ 18% GST i.e 2,714/-(Rupees two thousand seven hundred forteen only) payable in Banker's cheque/ Demand Draft drawn in favour of WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED payable at Kolkata. The cost of Bidding Document submitted by the bidder is 'Non refundable'. The bidder should deposit the cost of the bidding document physically at the office of the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL under sealed cover superscribing the name of the company, name of the work with NIT No. within the stipulated time before opening the technical bid. Scanned copy of the same has to be uploaded in the website given above with their bid.

The bidders are advised to visit the site of installation and obtain all the necessary information as required for submission of their bid.

An Earnest money of Rs. 46,000/-(Rupees Forty six Thousand Only) shall have to be submitted in form of Bank Guarantee (as per the Pro-forma given in the tender document)/Demand Draft/Banker's Cheque to be drawn from any nationalized bank or scheduled bank of RBI in favour of "WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED" payable at Kolkata and the same has to be documented through e-filing. The original Bank Guarantee/Demand Draft/Banker's Cheque against Earnest Money Deposit (EMD) must be submitted physically at the office of the Chief Engineer, Solar Power Generation Department (SPGD),5th floor, B block, WBSEDCL, under sealed cover superscribing the name of the company, name of the work with NIT No. within the stipulated time before opening the technical bid. No interest shall be claimable on Earnest Money Deposit. Contact Person:

The Chief Engineer

Solar Power Generation Department (SPGD),

West Bengal State Electricity Distribution Company Limited (WBSEDCL),

Vidyut Bhavan, 5th Floor, B – Block, Block – DJ, Sector – II,

Salt Lake, Kolkata - 700091, West Bengal, India

Corporate Identification No (CIN):U40109WB2007SGC113473

Website : www.wbsedcl.in

Contact No.: (033)23197-784

Email id : solarwbsedcl18@gmail.com

The Pre-Bid meeting will be held on 11/05/2020 at 14.00 hrs at the office of the Chief Engineer, Solar Power Generation Department (SPGD), 5th Floor, B Block, Vidyut Bhavan. However, Pre-bid queries, if any, have to be submitted on or before 08/05/2020 up to 16.00 hrs as per attached Proforma-13 through email to solarwbsedcl2018@gmail.com.

This bid is a No Deviation Bid. However, request for any deviation may be considered only if pointed out by any prospective bidder(s) in the pre-bid meeting.

The bid shall be of two parts and shall have to be submitted concurrently duly digitally signed in the website https://wbtenders.gov.inwithin the time as specified in the Bid Details. The intending bidders are required to submit their offer online only. No offline bid will be entertained and accepted. The Bidder(s) shall have to submit detail documentary evidence duly stamped and signed by any authorized person of their agency for fulfillment of above mentioned eligibility criteria along with Bid Documents. Details of the documents to be submitted are mentioned in the bid document.

Technical Bid will be opened on 18/05/2020 at 12:00 hrs. Financial Bid of the bidders will be considered only if the Technical Bid of the bidder(s) is found qualified by the Tender Inviting Authority. The decision of the Tender Inviting Authority will be final and binding on all concerned and no challenge against such decision will be entertained. The successful bidder will be selected by the Tender Inviting Authority based on the evaluation procedure mentioned in the tender document. The name of the qualified bidders will be displayed in the website. The date, time and place of opening of the Financial Bid will be notified later in the https://wbtenders.gov.in website.

If the dates of opening of Technical Bid and Financial Bid fall on holidays or on days of strike or natural calamity, the dates will be deferred to next working days. All bidders are requested to be present online during opening of bids positively. In no cases, his/her absence will stand against opening of bid.

WBSEDCL reserves the right to reject any Bid, or part thereof, or, all Bids received at its own discretion, without assigning any reason whatsoever. WBSEDCL is not bound to accept the lowest or any of the Bids. Whatever may be the outcome of the present invitation of bids, no cost of bidding will be reimbursed by the Tender Inviting Authority.

Alternative Bids will not be accepted. Conditional/incomplete bid will not be entertained.

Submission of Bid documents will not be construed to mean that such Bidders are automatically considered qualified. WBSEDCL will not be bound to award the job to the lowest bidder.

All documents, as submitted, will be property of WBSEDCL & will not be returned to the bidders under any circumstances. However, the EMD of the unsuccessful bidders will be returned within 45 (forty five) days after finalization of this contract for which a request letter shall be initiated by the concerned unsuccessful bidders.

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

Scope of work:

1.0 **SOIL RESISTIVITY**:

Soil resistivity in the area as directed by the Controlling Officer of the work by 'Wenner for electrode method' keeping inter electrode spacing 50 meters(as per latest revision of I.S.: 3043). At covered under Phase 1 & Phase 2 Solar Park Project of 200 MW Solar Park Projecty shall measured at intervals of 0.5 km or Incase soil characteristics changes within 0.5 km value shall have to be measured at intermediate locations also.

2.00 TECHNICAL SPECIFICATION OF SUB-SOIL INVESTIGATION;

To ascertain soil parameters in different stretches of 1032 acres of land named in this specification, the contractor shall carry out sub-soil investigation.

SCOPE OF WORK:

The scope of sub-soil investigation covers execution of complete soil exploration to construct building, Sub-station Foundations, Boundary wall, proposed Road, proposed embankment and existing embankment location etc. at different locations of West Bengal by test boring, drilling, collection of un-disturbed soil/ rock samples where possible, otherwise disturbed samples, conducting standard penetration tests, laboratory test of soil/ rock samples to find the various parameters as detailed in the specification of "Laboratory Test" and submission of detailed report in 6 (six) copies along with the recommendation regarding type of foundations to be adopted for each bore hole including the recommendation for soil improvement where necessary. The scope shall also include study of erosion characteristics if any at all locations.

List of I.S. Codes mentioned below shall be followed generally along with the specification depending on the condition and type of soil/ rock(if any) encountered, in connection with collection of undisturbed/disturbed soil/ rock samples, measuring soil resistivity, recording Ground Water Table, physical and laboratory test method and procedures and submission of soil investigation test report with specific recommendation of type of foundation both for erecting module mounting structure and other construction e.g Road,embankment,water reservoir,building etc to be adopted.

List of I.S. Codes :-	1498, 1892, 1904, 2131, 2132, 2720, 2809, 3025, 6403, 6935, 7422, 8009,
(Latest Revision)	9259, 3043, 4078, 4434, 4453, 4464, 5313, 4968(part-II), 1121,1122, 1124

TEST BORING:

The boring shall be done at locations mentioned below as well as at all other spots found necessary for sub-soil investigation shall be finalised in consultation with the Engineer Incharge of the work. It will be done at twenty two two nos of spots across the land measuring 1032 acres specially on the proposed embankement locations, proposed Control Room Building spot, Solat Plant sites etc

2.02.1 Test boring at different layers in all kinds of soil have to be carried out as below:

a) Method of boring, selection of sampling tubes, sampling, recording of boring, protection, handling, leveling of samples shall be done as specified in I.S. 1892-1979, (latest revision), after obtaining approval from the Engineer-in-Charge. The contractor/consultant shall furnish in the soil report in details of the equipment and method of boring actually adopted by 30 th June 2020 positively.

- b) Depth of boring below ground level shall normally be 10 meters only for twenty spots and 30-40 meters meters for two other strategic spots unless continuous bed rock is encountered earlier. In case rock is encountered at any depth within 10 M adequate study of strength characteristics shall be done and recommendation shall be given, and or where deep foundations are envisaged, boring upto a depth of 30 -40 M may be necessary.
 - c) Collection of representative undisturbed soil sample from exploratory boreholes as per provision laid done in IS: 2131- 1983 (latest revision), at an interval of 1.5 M depth or change of sub-soil strata or as directed by Engineer-in-charge.
 - d) In case collection of undisturbed samples becomes difficult / impossible, detailed soil testing on remolded soil sample is to be conducted as stated above and included in the soil report.
- 2.02.2 *Un-disturbed soil samples shall be obtained for initial 5.0 meters depth at every 1.0 meter interval and at change of strata. After initial 5.0 meters depth samples shall be obtained preferably at every 1.50 meters or where there is a change of strata.
- 2.02.3 *Standard Penetration test as per I.S. 2131-1983 shall have to be performed in different strata or to refusal whichever occurs early and recorded properly (By refusal means S.P.T below count (N) of 100 and recorded properly for 30 cm. penetration).
- 2.02.4 *The ground water table shall be recorded during boring/drilling operation and Incorporated in the bore-log. If possible, the position of water table just after monsoon be also ascertained locally and indicated in the report.

2.03 LABORATORY TESTS:

The method and procedure of testing of soil/ rock samples to be followed shall be as per relevant I.S. Codes. Adequate volume of test samples shall be collected from site. All Samples, both undisturbed/ disturbed shall be identified properly with the bore-hole no. and the depth from which they have been taken and sealed at both ends immediately after recovery as specified in relevant I.S code and transported carefully to laboratory for carrying out necessary laboratory tests to find out the following parameters of every sample. Date and time of taking of the sample shall be recorded in the test report. The method and procedure of testing to be followed shall be as per IS-2720(Latest Revision) to find out the following parameters of laboratory test:-

- a) Optimum/Natural moisture content, Liquid limit, Plastic limit, shrinkage limit, and liquidity/Plasticity Index, toughness index, activity no. degree of shrinkage i.e. consistency as per Waterbury limits. (In tabular form)
- b) Bulk, Dry and Buoyant density of soil, unit wt., Specific gravity, degree of saturation and relative density. (In tabular form)
- c) Void Ratio (e-log P curve shall have to be submitted).

- d) Grain size distribution(sieve analysis and hydrometer analysis) (Curve should be submitted)
- e) Permeability test.
- f) Chemical tests for both water and soil samples at different layers.
- g) Sieve analysis
- h) Hydrometer analysis for cohesive soil sample.
- i) Differential free swell index test and swelling pressure thereof with calculation.
- j) Unconfined compression test on undisturbed cohesive soil sample.
- k) Tri-axial shear test in un-consolidated un-drained location on cohesive soil for determination of shear strength parameter and angle of internal friction.
- Tri-axial shear test in consolidated drained condition on granular soil sample for determination of shear strength parameters and angle of internal friction.

Direct shear test on granular sample for determination of shear strength parameters.

- m) The bearing capacity of the soil pile foundation at a depth of 1m, 2m, 3m below ground level as
 n) per IS- 6403-1981 with detail calculation have to be submitted i/c. the formula of each type of foundation Factor of safety shall be considered as 2.5 for evaluation of net safe bearing capacity of soil.
- Consolidation test on cohesive soil sample for determination of settlement potential. Detail calculation shall have to be done for the following pressure intensity as per I.S-2720:
 - i) 5T/m2
 - ii) 10T/m2
 - iii) 15T/m2
 - iv) 20T/m2
- p) For rock samples laboratory test may be done for determination of followings:Compressive / Transverse/ Tensile/ Shear Strength, True Specific Gravity, water absorption.

2.04 SUBMISSION OF SOIL INVESTIGATION REPORT:

The contractor / Soil Consultant shall submit a comprehensive report along with graphs, curves, drawings etc. on the basis of field data and laboratory test results.

The report shall contain specific recommendation regarding type of foundation to be adopted for each bore hole including type of soil improvement for very weak soil, erosion characteristics for the Solar Project/Solar Park Project.

The report shall also contain the specific suggestions / recommendation of the soil consultant regarding use of , bored pile foundation for locations where quick sand phenomenon is anticipated.

The report shall contain classification of type of foundation for Solar Project such as dry, wet, partially submerged, fully submerged in accordance with clause no. 8 of IS code 5613(part-II, Sec-2) – 1976 and also furnishing the following:

- a) Reference to Order no. and name of the scheme
- b) Layout plan showing the locations of bore holes.
- c) Record of boring as per Appendix-D(clause 6.5.1) of IS 1892-1972 (latest), bore log of each bore hole identifying the stratification and type of soil stratum with depth and showing the location of water table, value of SPT at various concerned depth and laboratory test results conducted from the samples collected at various depth.
- d) Detail of field investigation. Date and time of taking soil sample for the individual bore holes
- e) The soil profile with plotting of corrected penetration resistance.
- f) Date of laboratory tests for all the samples
- g) Detailed laboratory and field tests, test results shall be summarized strata wise as well as in combined tabular form with all relevant graphs, charts, diagram, and photographs, if any.
- h) Special recommendation and observation, If any.
- i) Submission of net safe bearing capacity based on the shear strength parameters of the subsoil deposit in direct contact with the foundation at 1.0m, 2.0M, 3.0M depth below the existing ground level shall be given for embankment(proposed and existing) and sub-stations the above information may be made available at all the locations for different foundation or as directed by Engineer-in-charge including recommendation of adoption of foundation depth.
- ii) -do- above, computation of net safe bearing capacity at different layers as mentioned above but considering 25mm. of total settlement including recommendation for safe adoption of foundation

GENERAL CONDITIONS OF CONTRACT

1.0 **EARNEST MONEY**:

The tender shall be accompanied by EMD of Rs.46,000/- (Rupees Forty six thousand) only to be deposited in the form of Bank Draft / pay order / Banker's cheque drawn on any Nationalised Bank in Kolkata in favour of West Bengal State Electricity Distribution Co. Ltd. This EMD shall be retained by the WBSEDCL for a period of one year from the date of opening of tender. The EMD will be liable for refund to the empanelled contractors on expiry of the validity period of the tender. The EMD will be refunded to the non-qualified contractors/Consultants, if any soon after they being declare unsuccessful.

2.0 **VALIDITY OF TENDER**:

Rate offered against the Tender shall remain valid for a minimum period of one year from the date of publication of Notice.

3.0 **SIGNATURE OF BIDS**;

The bid must contain the name and place of business of the persons submitting the bid and must be signed (with date) and sealed by the bidder with his/their usual signature(s).

Bids by partnership firm must be furnished with the full names of all the partners and be signed with date with the partner's name by one of the members of the partnership firm or by any authorised representative followed by his signature and designation.

Bids by Corporation/Company must be signed (with date) with the Legal name of the Corporation/Company, by the President/Secretary or other person or persons authorised to bind Corporation/Company in the matter. Power of attorney of bidder's authorised persons signing the bid shall have to be attached.

4.01 *PRICE BID*:

The bidder shall quote Final & firm item wise(Items as mentioned in the schedule) rates excluding GST. The GST as applicable at the time of execution shall be paid extra. For soil investigation work and soil resistivity test unit rates as desired shall be quoted. No extra cost for staging etc. shall be made for boring in water which shall be considered to be built in the offered rate per location. No escalation of rate shall be paid for the work.

4.02 The contractor shall be liable and responsible for payment of all income tax and all other taxes and duties etc. which may be levied by the authorities on payments received from the owner under terms of this contract and shall keep and continue to keep the owner indemnified in this regard.

5.0 **QUALIFYING REQUIREMENTS OF THE BIDDERS**:

a) Should have done detailed soil investigation work which includes conducting fields and laboratory tests and submission of reports, should have done survey and soil resistivity tests.

If the bidder proposes to engage some consultants/firms or get themselves associated with such consultants / firms for carrying out some part of the total job narrated above, then full credentials of such consultants/firms and consent letter for such associations must be submitted . However, the Board reserves the right to judge the capacity and capability of the intending bidder, their consultant / firms to be associated for execution of the job. The decision of the tendering authority in this regard shall be final and binding.

6.0 Policy for bids under consideration :

6.01 Bid shall be deemed to be under consideration immediately after they are opened and until such time official announcement of award is made.

6.02

While bids are under consideration, bidders and their representative or other interested parties, are advised to refrain from influencing in any manner what-so-ever, any WBSEDCL personnel or representative on matters related to the bids under study. The bidder, if necessary, will obtain clarification of bids by requesting such information from any or all the bidders either in writing or through personal contact as may be required. Bidders will not be permitted to change the substance of his bid after bids have been opened.

7 TERMS OF PAYMENT WHEN AWARDED A JOB CONTRACT:

(I) FOR SOIL INVESTIGATION WORK:

- a) Progressive payment for soil investigation work shall be made at the rate of 80% of the cost for soil investigation work on completion of soil investigation work for the total number of bore-hole location and submission of draft report.
- b) The balance 20% price for soil investigation work shall be paid on completion of soil investigation work for all the bore-hole locations mentioned above and submission and acceptance of final report in six copies.

(ii)For Sub-Station Area:

Progressive payment for soil investigation work shall be made at the rate of 80% after completion of the field work, laboratory tests & submission of draft reports. And balance 20% after submission of final reports in 6(six) copies.

All payments shall normally be made within 4(four) weeks of submission of clear bills with all documents.

If the bidder proposes to engage some consultants firms or get themselves associated with such consultants/firms for carrying out some part of the total job narrated above. The full credentials of such consultants/firms and consent letter for such associations must be submitted . However, WBSEDCL reserves the right to judge the capacity and capability of the intending bidder. Their consultant/firms to be associated for execution of the job. The decision of the tendering authority in this regard shall be final and binding.

9.0 **INSURANCE**:

It will be the responsibility of the bidder to make necessary insurance coverage to take care of all his liabilities, either direct or indirect, in pursuance of the contract and shall keep the owner indemnified in this respect at all time.

10.0 **COMPLETION TIME**:

The completion time of the work shall be as prescribed in the NIT

11.0 <u>LIQUIDATED DAMAGE(WHEN AWARDED A JOB CONTRACT)</u>:

If the contractor fails to complete the work within the time specified in the contract or any extension thereof, the purchaser shall recover from the contractor as liquidated damage a sum equal to 0.5% of the value of work per week or part thereof executed beyond this completion period. The total recovery against liquidated damage shall not exceed 10% of the contract value.

12.0 SUB-LETTING OF CONTRACT:

The Contractor shall not, without the written consent of the SPGD, WBSEDCL, assign or sublet any part thereof. Any such Consent when given shall not relieve the contractor from any obligation, duty or responsibility under the contract. In the event of sub letting of contract or any part thereof is permitted, the fact that such permission has been accorded shall not establish any contractual relationship between the approved Sub-vender and WBSEDCL of any of his liabilities and obligation under the contract.

13.0 CONTRACTOR'S DEFAULT LIABILITY (WHEN AWARDED A CONTRACT)

The purchaser may upon 14 days written notice of default to the contractor terminate the contract under the circumstances detailed hereunder.

If the contractor fails to commence the work in time or maintain the progress of work so as to complete the work within the time specified in the contract agreement or within the period for which extension has been granted or otherwise incapable to continue with the work.

14.0 SUPERVISION (WHEN A JOB CONTRACT IS AWARDED)

All work under the contract shall be carried out under the direction and to the reasonable satisfaction of the controlling officer. The contractor shall be responsible for the correctness of the position, levels and dimensions, not with standing the fact that he might have been assisted by the controlling officer or his authorized representative in setting out the same.

The contractor shall establish a field office and employ at least one competent representative for the proposed contract. The address of the field office and the name(s) of the representative(s) shall be made known in writing to the Controlling Officer by the contractor.

The Controlling Officer shall be at liberty o o to object to the presence of any representative or persons employed by the contractor for execution of work or otherwise in the site of work, who in his opinion is found to have misconducted himself or be incompetent or negligent and the contractor shall remove the person(s) so objected to upon receipt from the Controlling Officer a notice in writing requiring him to do so and shall provide ink his place a competent representative at the contractor's risk and cost.

15 **SETTLEMENT OF 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.

If such disputes did not get resolve 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.

16 LAW GOVERNING CONTRACT:

The laws applicable to this contract shall be the laws in force in India. Appropriate Court in West Bengal shall have exclusive jurisdiction in all matters arising under this contract.

17 DECLARATION OF ENLISTMENT AND PRE-SET RATES

The purchaser reserves the right to accept or reject any or all bids without assigning any reason whatsoever and does not bind itself to accept the lowest bid. The working rates shall be settled in post-bid conference with the parties and shall remain firm & binding to all during the tenure of the enlistment.

18 DEVIATION IN TERMS AND CONDITIONS:

All work covered by the specification shall be carried out in accordance with the conditions stipulated in this document, where no deviation in general terms & conditions would normally be entertained.

19.0 ERROR/OMMISSIONS IN SCHEDULE

The schedule of work has been prepared covering all aspects of execution and technical parameters involved in such kind of work as far as possible. If however any error/omission of item is noticed by the intending bidder, he/they may clearly indicate the same separately in the tender with impact of rates/ charges for the same, if any. However PW(Roads) Schedule of work and Different IS Codes will be the guideline

(D.K. Paul)

Chief Engineer

Solar Power Generation Department

CONTRACT AGREEEMENT FORM

(On Non-Judicial Stamp Paper of denomination Rs.100.00)

ARTICLES OF AGREEMENT made this			
yearbetween West Bengal State Electricity Distribution Co. Ltd, a statutory body			
constituted by the Govt. of West Bengal having its Head Office at Bidyut Bhavan, Block - DJ, Sector - II,			
Kolkata - 700 091, hereinafter referred as the 'WBSEDCL'(which expression shall unless exclude by or			
repugnant to the context be deemed to include its successors and assigns) of the ONE PART			
ANDhereinafter referred to as the 'CONTRACTOR' (which expression			
shall unless excluded by or repugnant to the context be deemed to include his heirs, executors, administrators,			
representative and assigns) of the OTHER PART.			
WHEREAS the WBSEDCL invited teneers vide Tender Notice NO			
(annexed hereto) for construction of			
AND WHWEREAS in pursuance of such invitation for tenders the contractor submitted a tender vide			
nodated(annexed hereto)			
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 Order			
NOdated(annexed hereto).			
NOW, THEREFORE, THE WBSEDCL AND THE CONTRACTOR AGREE AS FOLLOWS: -			

1)	The	contractor	agrees	to	undertake	e the	work
	of					Per	Order
	No	•••••	•••••	dated	refe	rred to above.	
2)	The	WBSEDCL	agrees to	pay the	Contractor	as per	the Order
NO		••••	da	ated		Referre	ed to above.
3) Both the contractor and the WBSEDCL 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 this day, the month and year written as above.							
	•••••	•••••	•••••			•••••	• • • • • • • • • • • • • • • • • • • •
	C	CONTRACTOR				WBSED	CL

1. NAME OF THE WORK

Design & Engineering, Manufacture / Procurement, Supply, Packing and Forwarding, Transportation, Unloading, Storage at site, Site development, Construction, Erection, Installation, Testing and Commissioning including warrantee obligation with 05 (Five) years Comprehensive Operation and Maintenance of 10 MW (AC) Solar Photovoltaic Power Plant at Patni (Khemasuli), Paschim Medinipur, West Bengal.

2. REGISTRATION OF CONTRACTOR

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

3. DIGITAL SIGNATURE CERTIFICATE (DSC)

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

4. TENDER FEE

The cost of the tender document will be Rs. 24,000.00 (Rupees Twenty Four Thousand only) payable in the form of Banker's Cheque / CTS 2010 complaint Demand Draft to be drawn in favour of "WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED" payable at Kolkata. The cost of tender document submitted by the bidder is 'NON-REFUNDABLE'. The bidder should deposit the tender fee physically at the office of the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL from 01.03.2017 to 03.03.2017 (11:00 hrs. to 16:00 hrs. except holidays).

5. SITE VISIT

The bidders are advised to visit the site of installation and obtain all the necessary information as required for submission of their bid. The bidder may visit the proposed site during the presence of the officials of WBSEDCL on 06/02/2017 & 07/02/2017 from 11.00 hrs to 16.00 hrs. giving prior information in writing or through e-mail to this office.

6. PROCESS TO BE CONFIDENTIAL

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

7. ELIGIBILITY CRITERIA FOR PARTICIPATION IN THE BIDDING:

7.1 General

The Bidder should be either a body incorporated in India under the

Companies Act, 1956 or 2013 including any amendment thereto or Partnership Firm registered as per Partnership Act 1932 or Statutory Body or Bidding Consortium with one of the members acting as the lead member of the bidding consortium and must submit Trade licence, Certificate of Incorporation/ Registration Certificate, VAT registration, Service Tax registration, PAN Card, PF Registration, Profession Tax Registration as per the applicability. Submission of audit report for companies registered under companies Act and Tax audit report for partnership firm for the last 03 (three) financial years (2013-14, 2014-15, 2015-16), Income tax return for the last 03(three) assessment years (2014-15, 2015-16, 2016-17) and associated statutory clearences/ certifications would be necessary.

7.2 Technical Eligibility Criteria

- 7.2. (a) The bidder shall have the credential of satisfactory execution of contract(s) in planning, design and engineering, manufacture/ procurement, supply, installation, testing and commissioning with comprehensive operation and maintenance of at least 01 (one) no. 08 (Eight) MW or 02 (two) nos. 05 (five) MW or 03 nos. 03 (three) MW capacity Grid Connected Solar PV Project or higher capacity of similar project in each case during preceding 05 (Five) years from the Bid submission start date.
- (b) The plant(s) should have been operating successfully for minimum 01 (one) year from the Bid submission start date.

The bidder should furnish documentary evidences of satisfactory performances of the said solar power plants by way of submission of monthly generation data on annual basis along with performance certificates issued by the purchaser for minimum 01 (one) year from the Bid submission start date. The certification by the bidder for his own Solar PV power plant shall not be acceptable.

Documents related to installation of grid connected SPV Plant on EPC mode having capacity less than 01 (One) MW need not be submitted.

- (c) Bidder should submit, in support to the above, the list of projects commissioned along with their work order/ LOI and the commissioning certificates along with the Certificate of Successful Operation/ satisfaction from the Solar Power plant owner as per the format given under "Pro-forma"
 - 7: Satisfactory operation of Solar PV Plants"
- (d) The bidder should submit a list of contracts of similar nature presently under execution giving details of client, completion time, scope and value of work.
- (e) The bidder may have either in-house facility for structural design and civil design, the array structure and foundation design and the design drawings should be signed by competent engineers having minimum LBS/ESE/EBA license or, otherwise design should be prepared and or vetted by reputed civil engineering design firm having structural engineer with minimum LBS / ESE / EBA License.

- (f) A list of key professionals is to be furnished by the bidder as the Project Team Structure for the proposed work mentioning their experience and qualification.
- (g) The bidder should submit Project Proposal mentioning necessary schedule of work(s)/ equipment(s) with BOQ and Single Line Diagram. (h) **Detail Criteria** for formation of Consortium
- A copy of consortium agreement shall be submitted to WBSEDCL indicating the lead contractor, who will be responsible for all activities pertaining to the work.
 Lead entity will sign the bid document on behalf of the consortium formed for this purpose and duly authorized by the constituting entities of the consortium in this regard.
- A bidder may be a single entity (the "Bidding Company") or group of entities (the "Bidding Consortium"), coming together to implement Project. The term Bidder used herein would apply to both a single entity and a Consortium. No Bidder applying individually or as a member of a Consortium, as the case may be, can be member of another Bidder.
- The Bidding Consortium can be Association of Persons (AOP) or combination of entities with the legal status as per the relevant/ applicable laws of India having audited financial statements for at least three (3) complete financial years from the date of its operation/ incorporation.
- Bidding Consortium shall be formed with only one of the Entities as Lead member/ Entity and the other Entities as Members of the Consortium. Consortium of Entities short-listed based on this RFS has to necessarily form a Project Entity.
- In case of Bidding Company/Bidding Consortium of Companies/Entities, for the purposes of meeting financial requirements, only unconsolidated audited annual accounts shall be used. The resulting consortium constituents shall clearly state their interests/ stakes in the consortium.
- The Bidder may seek qualification on the basis of technical and financial capability of its Parent Company and / or it's Affiliate(s) for the purpose of meeting the Qualification Requirements.
- The total numbers of entities/individuals comprising consortium shall not exceed four.
- Specimen Consortium Agreement & Power of Attorney for Lead Member of Bidding Consortium shall have to be submitted as per proforma 14 & 15 respectively of the tender document.

7.3 Financial Eligibility Criteria

(a) 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, VAT registration,

Service Tax Registration, PAN Card, PF registration, Profession Tax Registration as per the applicability.

(b) The bidder should submit reports on the financial standing i.r.o. solvency of bidder company/ firm as certified by bankers, Audit report for companies registered under companies act and tax audit report for partnership firms for last 03 (three) financial years (2013-14, 2014-15, 2015-16).

- (c) The bidder shall submit Income Tax return for the last 03 (three) financial years (2013-14, 2014-15 & 2015-16).
- (b) The bidder should have an average annual turn-over of minimum 50 (fifty) Crores during last 03 (three) consecutive financial years (2013-14, 2014-15 & 2015-16) for participation in the bidding process.
- (c) Working capital in the preceding year of bid submission will not be less than 30% of the estimated cost of the project. In case working capital falls below the minimum 30%, the short fall will be compensated with production of certified credit facility (fund based credit facility only) from a scheduled bank.
- (d) Financial Consortium is not allowed in this Bidding Process.
- (e) The bidder should submit letter of undertakings, evidence of access to or availability of credit/facilities, financial proposal containing Price Bid and Price Break-up as per the Proforma given in the tender document.

8. CLARIFICATION OF BIDDING DOCUMENTS & PRE-BID MEETING

- 8.1 The bidder shall be deemed to have carefully examined the Bidding Document and also to have been satisfied him as to the nature and character of the system to be supplied and installed against the contract, and all relevant matters & details should there be any discrepancy or, obscurity in the meaning of any of these clauses of the e-Tender documents or if there be any query of the intending Bidder, the Bidder shall set forth such discrepancies, doubt, obscurity or queries and submit the same through our email-id solarwbsedcl@gmail.com or physically at Solar Power Generation Department (SPGD), WBSEDCL at 5th Floor, B-Block, Vidyut Bhavan on or before 06/02/2017 (through e-mail) for necessary clarification by WBSEDCL & further action in this regard.
- 8.2 To assist in the examination evaluation and comparison of Bids, WBSEDCL may ask the bidder individually for a clarification of his Bid including break up of unit rates. The request for clarification and the responses shall be in writing or by cable but no change in the price or substance of the Bid shall be sought, offered or permitted except as required to conform the correction of arithmetical errors discovered by WBSEDCL during the evaluation of the Bids in accordance with clause no. 23 of ITB.
- 8.3 The Pre-bid meeting will be held on 10/02/2017at 14:00 hrs at the office of the Chief Engineer, Solar Power Generation Department (SPGD), 5th Floor, B Block, Vidyut Bhavan.
- 8.4 Non attendance at Pre-Bid discussion will not be a cause for disqualification of bidders. The clarification given in the Pre-Bid discussion shall be final and binding on the bidder, being a part the original Bid Documents.

9. DEVIATION

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

10. AMENDMENT OF BIDDING DOCUMENTS

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

11. NET MINIMUM GUARANTEED GENERATION (NMGG)

Bidders shall have to ensure Net Minimum Guaranteed Generation @ 1.52 MU/MW 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 05 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 Net Minimum Guaranteed Generation.

The Generated energy will be measured at the Outgoing feeder of the switchyard of the Solar PV Power Plant i.e. the Net Minimum Guaranteed Generation will be calculated after considering the Auxiliary Load. As the solar PV power plant will be grid connected type grid outage will be considered for calculating NMGG. For calculating grid outage, operation time of the plant will be considered as 12 hours (6 am to 6 pm) every day all over the year and NMGG will be relaxed proportionately as per calculated outage hours. No relaxation in NMGG will be considered for any other losses occurred in the system.

The bidder shall submit a declaration for the Net Minimum Guaranteed Generation with their bid. Non-submission of the said document will entail for disqualification of the bidder.

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

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

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

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

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

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

A. TECHNICAL PROPOSAL

(A.1) Statutory Cover:

a) To be submitted in "Drafts" folder

i.Tender Fee:

Scanned copy of CTS 2010 complaint Demand Draft (DD)/Banker's Cheque (BC) towards tender fee as prescribed in the NIT, in favour of "WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED" payable at Kolkata as per clause no. 4 of ITB. ii.Earnest Money (EMD):

Scanned copy of the Demand Draft/Banker's Cheque/Bank Guarantee against Earnest Money Deposit (EMD), in favour of WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED' payable at Kolkata as prescribed in clause no. 17 of ITB.

b) To be submitted in "Annexure" folder

i. Application for Tender (Vide Proforma – 1)

c) To be submitted in "NIT" folder

i. Notice Inviting Tender (NIT) ii. Addenda

/Corrigenda: if published

Note:Bidders are to keep track of all the Addendum / Corrigendum issued with a particular tender and upload all the above digitally signed along with the NIT.

Tenders submitted without the Addendum / Corrigendum will be treated as informal and liable to be rejected.

d) To be submitted in "Forms" folder

- i. Check List(Vide Form I)
- ii. Summary statement of average annual turnover / yearly audit report (Vide Form 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.
- iii. Statement of orders executed during last five years (Vide Form -III)
- iv. Pro-forma for undertaking to be submitted by the Bidders (Vide Form IV)
- 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.

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

i. Company Details:

Proof of Company Incorporation / Trade Licence

ii.Certificates:

- 1) PAN Card details.
- 2) Current Professional Tax (PT) submission Challan. Application for such addressed to the competent authority may also be considered.
- 3) CST /VAT/TIN registration certificate.
- 4) Service Tax, PF registration certificate/current challan
- 5) Exemption Certificate, if any, issued by any competent authority iii. Financial

Information:

- 1) Income Tax return for the last 03 (three) FY (2013-14, 2014-15 & 201516)
- 2) Proforma for Evidence of Access to or Availability of Credit / Facilities (*Vide Proforma 4*) iv.Credential:

Copy of the 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, shall be submitted in support of minimum eligibility criteria as per Clause no. 7 of ITB.

v.Declaration:

1) List of Orders in hand

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

- 2) Declaration for Net Minimum Guaranteed Generation (Vide Proforma 5)
- 3) Bill of Material (Vide Proforma 6)
- 4) List of key personnel available and proposed to be engaged for the project mentioning their experience and qualification
- 5) Others: Any other documents (Proforma- 14 & 15 regarding consortium eligibility and any other document if found necessary).

Note:

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

B.FINANCIAL PROPOSAL

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

Bill of Quantities (BOQ)

The financial proposal will contain Price Bid and Price Break-up as given in Proforma: 2, Pro-forma: 3 A, Pro-forma: 3 B & Pro-forma: 3 C respectively in the

tender document. The bidder should fill up the documents by their respective cell and upload that same in the designated location of the Financial Bid.

Note:

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

14. SUBMISSION OF ORIGINAL COPIES OF DOCUMENTS OF TENDER FEE AND EARNEST MONEY DEPOSIT:

- i. **Mode of Payment**: Tender Fee must be submitted in the form of CTS 2010 complaint Bank Draft (DD) / Bankers Cheque (BC) of any scheduled Bank of India. EMD must be submitted in the form of Bank Draft (DD) / Bankers Cheque (BC) / 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 DD/BC/BG, towards Tender Fee and 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,

Vidyut Bhavan, 5th Floor, B-Block, Bidhannagar, Kolkata – 700091.

iii. **Time of submission:** The original Bank Guarantee/Demand Draft/Banker's Cheque against Tender Fees and Earnest Money Deposit (EMD) must be submitted physically at the office of the 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, name of the work etc. within 01/03/2017 - 03/03/2017; 11:00 -16:00 hrs (Except Holidays). 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. EARNEST MONEY

The Earnest Money shall have to be submitted in the form of, Banker's Cheque/Bank Guarantee (as per Pro-forma: 8) / Demand Draft to be drawn in favour of "WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED" payable at Kolkata and shall be valid for a period of 6 (six) months with a claim period of 03 (three) months.

The amount of EMD against the project shall be Rs. 1, 14, 25, 000/- (Rupees One Crore and Fourteen Lakh Twenty Five Thousand Only).

The EMD amount shall be released to the successful bidder after receiving Performance Security/Contract Performance from the contractor within the stipulated date mentioned in the Letter of Award (LOA). But the EMD of the unsuccessful bidders will be returned within Forty Five (45) days after finalization of this contract for which a request letter has to be initiated by the concerned unsuccessful bidders to the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL, 5th floor, B Block, Vidyut Bhavan, Block-DJ, Sector-II, Salt Lake, Kolkata-700091.

In case, WBSEDCL cancel the Tender on his own for any reason, the EMD submitted by the bidders will be returned without any interest subsequently, for which a request letter has to be initiated by the authorised tender applicant.

18. FORFEITURE OF EMD

EMD shall be forfeited, if

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

19. PERFORMANCE SECURITY/CONTRACT PERFORMANCE

The Successful bidder shall submit a Performance Guarantee within 30 (thirty) days from the date of issuance of LOA in the form of bank guarantee (PBG) for an amount not less than 10% (ten per cent) of the total value of the contracts valid initially for a period of 1 (one) year with a claim period of 03 (three) months. The

PBG shall be extendable up to total 05 (Five) years of O&M period from the date of final commissioning of the plant.

The above mentioned PBG shall also cover the guarantee against offered minimum annual generation of the plant upto initial O & M period of 05 (Five) years from the final date of commissioning of the entire plant.

In case of failure of requisite performance in terms of generation on part of the bidder, in either year the relevant penalty clause shall be imposed and the bidder will have to submit full amount of Bank Guarantee covering 10% of the total value of the contracts accordingly.

20. FORFEITURE OF PERFORMANCE SECURITY

Performance Security/Contract Performance shall be forfeited if,

- a) The successful bidder do not execute the work after placement of Letter of Award (LOA) and/or,
- b) The successful bidder will discontinue the work without prior permission of the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL and/or,
- c) The successful bidder fails to install/procure the total capacity of the plant as mentioned in the tender document and/or,
- d) The contractor fails to submit a fresh BG 30 (thirty) days prior to expiration of the previous BG against performance security of appropriate amount as per the terms and conditions and/or,
- e) The successful bidder fails to rectify/replace of the defective/damaged equipment(s)/work(s) within the Defect Liability Period.
- f) In case of non-fulfillment of Net Minimum Guaranteed Generation in successive two years during O & M period of initial five years and no action on part of the contractor towards mitigating the said short fall in power generation.

21. 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.

22. VALIDITY OF OFFER

The offer against tender should remain valid for a minimum period of 180 days from the next day of opening of Price 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.

23. DETERMINATION OF RESPONSIVENESS

- 23.1 Prior to be detailed evaluation of Bids, WBSEDCL will determine whether each Bid is substantially responsive to the requirements of the bidding documents.
- 23.2 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.
- 23.3 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.
- 23.4 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.

24. CORRECTION OF ERRORS

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

25. OPENING AND EVALUATION OF TENDER

25.1 Opening of Technical Proposal

- i. Technical proposals will be opened by the Tender Inviting Authority or his authorised representative electronically from the website stated above, using their Digital Signature Certificate.
- ii. Technical proposals for those tenders, whose original copies of DD/BC/BG towards tender fee & EMD have been received, will only be opened. Proposals corresponding

- to which original copy of DD/BC/BG towards tender fee & EMD has not been received, will not be opened and will stand rejected.
- iii. Statutory Cover (vide Clause 13.A.1) will be opened first and if found in order, Non-statutory Cover (vide Clause 13.A.2) will be opened. If there is any deficiency in the Statutory Documents, the tender will summarily be rejected.
- iv. Decrypted (transformed into readable formats) documents of the Statutory and Non-statutory Covers will be downloaded for the purpose of evaluation.
- v. If the information furnished by the bidder in objective manner is not confirmed by the uploaded documents then the bidder will be out rightly rejected for Price Bid opening. The documents related to the furnished online information based on which the evaluation takes place will only be considered. If the bidder uploads any other document, it will be given no cognizance.

25.2 Technical Evaluation of Tender

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

25.3 Opening and Evaluation of Financial Proposal

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

26. AWARD CRITERIA

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

27. CURRENCIES OF BID

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

28. APPLICATION FOR TENDER

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

29. LETTER OF AWARD

Letter of Award will be given to the successful bidder 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.

30. CONTRACT AGREEMENT

The contractor (successful bidder) shall have to be entered into a Contract Agreement within stipulated time as mentioned in the Letter of Award with West Bengal State Electricity Distribution Company Limited (WBSEDCL) for the proper fulfillment of the contract as per Proforma: 10. 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.

31. INDEMNITY BOND

The contractor (successful bidder) shall have to produce Indemnity Bond as per Proforma: 11 within stipulated time as mentioned in the Letter of Intimation to the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL.

32. 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, if the whole tender is not cancelled/ postponed by the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL.

Notwithstanding anything stated elsewhere in the bid documents, the Contract to be entered into will be treated as a divisible Supply, Civil construction, Erection & Commissioning Contract and Comprehensive O & M Contract initially for 5 (five) years.

Award shall be placed on the successful Bidder as follows:

i) First Contract: For Ex-works supply of all equipment and materials

ii) Second Contract: For providing all other services like inland transportation, insurance for delivery at site, unloading, storage, handling at site, installation, testing and commissioning including performance testing in respect of all the equipment supplied under the "First Contract" and necessary Civil work including any other services specified in the Bid Document.

Both these Contracts will contain interlinking cross-fall breach clause specifying that breach of one Contract will constitute breach of the other Contract.

iii) Third Contract: For comprehensive Operation & Maintenance Services initially for 5 (five) years as specified in the Bid document.

33. 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.

GENERAL CONDITIONS OF CONTRACT (GCC)

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1. DEFINITION OF TERMS:

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

i. The 'Company'/'Purchaser'/'Owner'/'Department' shall mean the WEST

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

2. NAME OF THE WORK

Design & Engineering, Manufacture / Procurement, Supply, Packing and Forwarding, Transportation, Unloading, Storage at site, Site development, Construction, Erection, Installation, Testing and Commissioning including warrantee obligation with 05 (Five) years Comprehensive Operation and Maintenance of 10 MW (AC) Solar Photovoltaic Power Plant Project at Patni (Khemasuli), Paschim Medinipur, West Bengal. The proposed location is adjacent to Patni (Khemasuli) Railway Station and NH 16 about 20 km from Chowrangi, Kharagpur towards Guptomani. The location of the project is at 22.40° N Lattitude and 87.20° E Longitude. This land is found to be having some unevenness and average elevation of the proposed project site is about 58 m above MSL.

Scope of Work includes Design, Engineering, Manufacture/ Procurement, Supply of equipment and materials; testing at manufacturers works, inspection, packing and forwarding, unloading at site, associated civil works, services, permits, installation and incidentals, erection, testing and commissioning with Warrantee obligation of 10 MW (AC) Capacity Grid connected Solar PV Power Plant with associated equipments and materials at Patni (Khemasuli), Paschim Medinipur.

The equipment and materials the Solar PV Power Plant with associated system shall include but not be limited to the following equipments and sub-systems:

- a) Contractor shall at his own cost carry out site survey, soil investigation, measurement of soil resistivity, and other relevant parameters required for design of the system.
- b) Contractor shall prepare and submit the Detailed Design Report along with Project Master Plan to WBSEDCL which must contain site meteorological data considered with necessary supporting documents, calculations for annual energy generation, schedule of site works, detailed specifications of each equipments and works (as mentioned in the technical specification chapter of the tender document), all necessary drawings and associated calculations for selection of different equipments for the plant based on the site location and relevant code of practice.

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

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

The contractor needs to submit their Detailed Design Report to WBSEDCL within the time specified in the 'Time Schedule' of the Letter of Award (LOA).

The contractor shall submit 03 (three) sets of the Draft Detailed Design Report along with editable soft copy in a compact disk for approval.

After finalization of the same by WBSEDCL, the contractor shall submit 12 (twelve) sets of the finalized Detailed Design Report along with editable soft copy in a compact disk to carry out further course of action.

- c) The contractor should develop the land profile as per the approved land development drawings.
- d) The contractor shall supply all materials and equipment required for erection, testing & commissioning of the plant. The supply of materials shall also include transportation, loading and unloading at work site.
- e) Timely procurement and transportation to site in properly packed condition of all equipment, materials and miscellaneous item required to complete the project.
- f) Contractor shall arrange proper storage at site for the equipments and materials at his own cost and risk. The complete system shall be under the custody of the contractor till successful commissioning and handing over the plant to WBSEDCL. WBSEDCL in no case shall be held responsible for any loss/damage/theft of materials/equipment; so long those shall continue to remain under the custody of the contractor.
- g) The contractor shall carry out all necessary civil works for the power plant which include but not limited to the installation of PV array mounting structure & foundations, fencing & gates, construction of internal inspection path ways, access road (if required), electrical control room and a small office block, switch yard foundations and other details, watch tower, security room, utility services as required, cable trench, Deep Tube Well and drinking water system, water supply & drainage system required for utility services and cleaning of PV modules etc.
- h) The equipments and materials for 10 MW (AC) Solar PV Power Plant at Patni (Khemasuli), Paschim Medinipur shall include but not limited to the following:
- i. Solar PV Modules;
- ii. Array Junction Box;
- iii. Solar Inverters;
- iv. Three winding transformer;
- v. Ring Main Unit (RMU);

- vi. Cables and conductor;
- vii. Station Auxiliary Transformer;
- viii. LT switchgear;
- ix. DC Battery, Battery charging equipment & DCDB;
- x. Protection system;
- xi. Earthing system;
- xii. Control, monitoring and data acquisition system;
- xiii. Illumination system; xiv. Fire protection system; xv. Ventilation system;
- xvi. Air Conditioning system;
- xvii. Module cleaning arrangement;
- xviii. Drinking water system; xix. Weather station;
- xx. Communication system;
- xxi. Recommended spares;
- xxii. Required Tools and Tackles;
- xxiii. Inspection pathways
- xxiv. Control rooms and 33 KV Switchyard
- xxv. 33 KV HT Distribution Line up to nearest 33 KV Sub-station of WBSEDCL. 33 KV Transmission Line from 33 KV switchyard of Solar PV Power Plant to 33KV substation will be arranged by WBSEDCL. However, the contractor shall arrange the outgoing bay with necessary equipments/protection system and metering system for Net Minimum Guaranteed Generation and others as required.
- xxvi. 33 KV Indoor Switchgear
- xxvii. Drainage system
- xxviii. Fencing
- xxix. Cable Trench xxx. Required number of signage (Project Name Plate and caution as per IS);
 - xxxi. Project Documents (required no. of sets) etc. xxxii. Any other items required.
 - i) Installation, testing and commissioning of 10 MW (AC) Solar PV Power Plant at Patni (Khemasuli), Paschim Medinipur, West Bengal as per the approved time schedule.
 - j) 05 (Five) years comprehensive operation & maintenance of the plant shall also be in the scope of work. The contractor needs to submit 03 (three) sets of comprehensive user's manual and 02 (two) sets of Operation and Maintenance format book suitably useable for 60 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).

Deployment of adequate security personnel (minimum 1 no. of armed security guard and 3 nos. of security personnel in each of the three shifts) shall be a scope of the operation and maintenance.

PTZ (Pan-Tilt Zoom) outdoor camera as per requirement shall be deployed to cover the whole plant with night vision and central monitoring through 40" LED monitor/TV for surveillance during construction as well as after commissioning of the plant. PTZ cameras & 40" LED monitor shall be provided for monitoring the plant prior to the final commissioning of the plant.

The contractor shall arrange sufficient transportation arrangement (24X7) for the operation and maintenance purpose.

k) Provision of Safety items like hand gloves, shock treatment charts, rubber mats, danger/caution boards etc. shall be a part of scope of works. The contractor shall adhere to safety practices during

erection, commissioning and subsequent operation and maintenance of the system including fire prevention.

- 1) The contractor needs to clean all the debris from the site before final commissioning of the plant.
- m) Any other items not specifically mentioned in the technical specification and/ scope of work but which are required for successful completion and satisfactory operation of the solar power plant are deemed to be included in the scope of work/specification.
- n) The contractor should submit the total system warranty as per clause no. 23 of GCC 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.

3. CONTROLLING OFFICER'S DECISION

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

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

4. COMMENCEMENT & COMPLETION TIME

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

The whole work must be completed within 225 (Two Hundred and Twenty Five) days from the date of commencement.

i. Finalization of Detailed Design Report : 45 days

ii. Site work : 180 days

A detailed time schedule for the site work has to be prepared and submitted by the contractor with the Detailed Design Report.

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

5. SUBMISSION OF DETAILED DESIGN REPORT

The contractor shall submit 03 (three) sets of the Draft Detailed Design Report along with editable soft copy in a compact disk for approval.

Draft Detailed design report shall contain all requisite documents as mentioned in the 'Scope of Work'. The contractor should submit the same within 21 (twenty one) days from the date of issuance of 'Letter of Award'.

The contractor shall submit 12 (twelve) sets of the finalized Detailed Design Report along with editable soft copy in a compact disk to the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL within 45 (forty five) days from the date of issuance of 'Letter of Award' to carry out further course of action.

6. 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.

7. VARIATION, ADDITIONS AND OMISSIONS

The Contractor shall not modify the work except under direction in writing by the WBSEDCL. The quantities provided in the schedule of works are provisional only which may vary up to any extent or may be deleted altogether. The quoted rate of each item shall remain firm. The 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.

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.

8. 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.

9. DEPARTMENTAL MATERIAL

Departmental material shall not be issued to the contractor for the work except under special circumstances. For ABT metering system, the contractor shall communicate with the Testing Department (Distribution) for necessary action.

10. 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.

11. 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.

12. LIQUIDATED DAMAGE

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

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

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

13. 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.

14. 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.

15. DEFECT LIABILITY PERIOD

The term 'Defect Liability Period' shall mean the period of 365 (three hundred and sixty five) days from the Date of final commissioning of the work. If any defect is found within the defect liability period the contractor shall be liable to rectify/replace the materials at their own cost and responsibility.

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

After completion of defect liability period, and on completion of satisfactory rectification of defects, if any, reported within the defect liability period and on receipt of the application from the contractor and considering other factors as per clause no. 25 of GCC, the Controlling Officer of the work shall recommend for amount of the performance security/contract performance to be submitted by the contractor for the next year.

16. SUBLETTING OF CONTRACT

The contractor shall not, without the written consent of the Company, assign or sublet any part thereof, other than for raw materials, or for any part of the work provided that any such consent shall not relieve the contractor 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.

17. 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.

18. WBSEDCL'S RIGHT TO TERMINATE CONTRACT & HOLIDAY LISTING

- If the contractor fails to start the work within a month from the date of issue of the work order, the West Bengal State Electricity Distribution Company Limited shall have the right to cancel the work order with forfeiture of earnest money (Converted into initial security) without giving any notice to the contractor. The contractor may be subjected to holiday listing as per company's policy.
- If the contractor neglects, or fails to proceed with the work proportionate to the scheduled time of completion of the work or fails to complete the work within scheduled time for completion or within the extended time approved by West Bengal State Electricity Distribution Company Limited, the West Bengal State Electricity Distribution Company Limited shall have right to terminate the work order after giving notice in writing to the contractor. If the contractor fails after 14 (fourteen) days of such notice, to proceed with the work in the manner notified, West Bengal State Electricity Distribution Company Limited shall terminate the contract and call the contractor to take joint measurement along with the Engineer for the finished portion of work. If the contractor does not appear for joint measurement, ex-party measurement by West Bengal State Electricity Distribution Company

Limited will be taken as final.

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

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

APPROVAL

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

Testing and Inspection: Any authorized representative of WBSEDCL shall, at all times, have full access to all parts of the site, places from which natural materials are being obtained, during production, manufacture and construction and be entitled to examine, inspect, measure and test materials and workmanship, and check the progress of manufacture of plant and production of materials/equipments 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, 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 authorised representatives of the Outside Inspecting agency consisting of maximum two (2) persons for to and fro journey by Air from purchaser's Headquarter, including boarding and lodging at the place of inspection and transit, if any for the purpose of Inspection and Testing.

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

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

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

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

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

20. MODE OF EXECUTION

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

21. SUBMISSION OF PROGRESS REPORT

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

22. INSURANCE

Execution Insurance: It is desired that the contractor shall arrange for insurance coverage for the equipment, accessories, materials etc. to be delivered at site upto 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 of the PV plant, insurance will be made by WBSEDCL.

23. WARRANTEE

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 warrantee period of the complete systems of the Solar PV Power Plant will be 60 (sixty) calendar months from the date of final commissioning. However the performance guarantee of the PV Module shall be 25 years as per guideline of Ministry of New and Renewable Energy (MNRE), Government of India. 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.

The contractor shall submit recommended spares and quote the price of the same for extended warranty for next 60 (sixty) calendar months from the date of expiration of the first 60 (sixty) month's warranty period. The contractor shall submit the same before 30 (thirty) days prior to the said expiration of the first warranty period.

24. COMPREHENSIVE OPERATION AND MAINTENANCE

Maintenance contract shall be commence final commissioning of the plant.

05 (Five) years comprehensive operation & maintenance of the plant shall be in the scope of work. The contractor needs to submit 03 (three) sets of comprehensive user's manual and 02 (two) sets of Operation and Maintenance format book suitably useable for 60 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.

Time for repair/ replacement of equipment or any works in case of any major failure will be granted by the Controlling Officer considering the type of failure and receiving written prayer from the contractor for the same. But in general the downtime will be 72 hours.

The period of unavailability of grid & Force Majeure Conditions will not be considered as downtime.

After final commissioning of the plant, arrangement of security (minimum 1 no. of armed security guard and 3 nos. of security personnel in each of the three shifts) shall be a scope of the operation and maintenance.

The contractor shall arrange sufficient transportation arrangement (24X7) for the operation and maintenance purpose.

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:

- i. Regular cleaning of PV modules.
- ii. Checking & tightening of all electrical connections and mechanical fittings. iii. Checking and restoring of earthing system.
 - iv. Cleaning of Inverter and other electrical equipments.
 - 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.

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 by the supplier and WBSEDCL shall be carried out of all the major components of the power plant, about two months in advance of the annual maintenance period, in order to ascertain as to which components of the power plant require capital maintenance. 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 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.

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.

The contractor shall engage at least 02 (two) operator having necessary technical knowledge and experience at the plant.

Maintenance Report: Maintenance register / log book must be maintained at site. However, quarterly maintenance and monthly generation report of each location as per format duly approved by WBSEDCL must be submitted by the contractor to WBSEDCL on quarterly basis.

The contractor shall mention the annual operation and maintenance charge as a distinct part in their financial proposal (Proforma: 3 C – Price Break Up). Annual operation and maintenance charge shall be inclusive of security and transportation arrangement and shall not be less than 8% of their quoted price. The contractor shall submit detailed price break up for operation and maintenance work to WBSEDCL before final commissioning of the plant.

The payment shall be made on quarterly basis and the Eligible amount will be due for payment after the certification by the Controlling Officer within 45 (forty five) days from the end of each quarter subject to satisfactory performance and submission of maintenance report in regular basis as mentioned in Clause no. 28 of GCC. The quarterly amount shall be worked out by the Controlling Officer or his authorized representative by dividing the total quoted Annual Operation and Maintenance Cost for that particular year by 04 (four) i.e. the no. of quarters in a year. Further this quarterly amount payable shall be subject to clause no. 28 of GCC as per discretion of the Controlling Officer.

25. PENALTY & REWARD

25.1 PENALTY:

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

- a. If the contractor fails to repair/replace any defective material/equipment and/or run the whole plant satisfactorily for any equipment failure/ operator's fault within the downtime mentioned in clause no. 24 of GCC or 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 operation and maintenance charge for every week or part thereof subject to maximum 10% (ten percent) will be deducted from the annual operation and maintenance charge of that particular year.
- b. If the plant fails to generate the Net Minimum Guaranteed Generation (NMGG) as per clause no. 11 of ITB for that particular year and the plant fails to perform satisfactorily, WBSEDCL will realize the cost of Generation short fall at the average rate of power purchase of WBSEDCL as per the Tariff Order issued by West Bengal Electricity Regulatory Commission (WBERC) for that particular year from the Performance Security and/ or outstanding dues of the contractor. In such case, the PBG for next year shall be of exact amount of previous years PBG and submitted in accordance to the Cl. 19 of ITB as modified. The present average price of purchase of power by WBSEDCL is Rs. 4.07/ kWh. The price varies according to the approval of WBSERC.

25.2 REWARD:

If the plant performs satisfactorily and generate specified quantity of power during each year of 05 (five) years O&M period, a relaxation @ 01% of the PBG will be allowed during next year.

In case of failure of requisite performance in terms of generation on part of the bidder, in either year the relevant penalty clause shall be imposed and the bidder will have to submit full amount of PBG i.e. 10% of the total value of the contracts during next year.

26. LABOUR LICENSE

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

27. PRICE

Price shall be fixed/firm. No escalation shall be paid due to any reason what-soever. Price as quoted at column (III) of Proforma 2: Price Bid against Sl. No. 1, 2 & 3 should be equal to amount arrived by aggregating the quoted prices for the respective items in Proforma 3 A – Price Break up for supply of equipments & materials, Proforma 3 B – Price Break Up for Construction, Erection, Testing And Commissioning and Proforma 3 C – Price Break Up for Operation & Maintenance respectively. In case of any discrepancies between the rate or price as quoted in Proforma 2 and corresponding rates or price in Proforma 3 A, 3 B and 3 C, then rate or price as quoted or arrived in Proforma 3 A, 3 B and 3 C shall prevail and evaluation shall be done accordingly.

Amount of Execution Insurance shall be quoted in column (g) of Sl. No. 9 in the Proforma: 3 B - Price Break Up for Construction, Erection, Testing and Commissioning, considering the clause of Insurance under Clause No: 22 of GCC.

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

Installation charges associated with labour charge, testing & commission charges shall not be less than 05 % (five percent) of the quoted Total Price before considering Comprehensive Operation & Maintenance for 05 (Five) years.

Total annual operation and maintenance charge for 05 (Five) years shall be inclusive of security and transportation arrangement and shall not be less than 08 % (eight percent) of their total quoted price.

Prices shall be quoted and payable in Indian Rupees only.

28. PAYMENT

Payment will be made as per following schedule:

Sl. No.	Work Head	Pattern of Release of Billing Amount		
Part A	Mobilisation Advance: Interest Bearing Mobilization advance will be paid to the contractor against submission of BG equivalent to 110% of the Mobilisation Advance, subject to the conditions mentioned below. The interest will be at the Base Rate of State Bank of India at the time of recovery of the advance. The mobilisation advance will be recovered along with interests from the progressive bills to be processed against Sl. No. Part-B below. However, WBSEDCL may recover the amount in maximum two installments according to Bill value.	10% of Schedule of Prices of Proforma- 3 A.		
Part B	After Verification of site, Submission of Detail Design Report (DDR) & Project Implementation Schedule. Approval of Engineering & design of plant complete. Manufacturing drawings of equipments e.g. Modules, Inverters, transformers, module structures, HT equipments and all other accessories along with makes. QAP of inverters, modules, solar transformers, modules structures and all other equipments.			

	 i. After mandatory delivery of the following major materials and safe storage at site: 1. Solar Module 2. Array Junction Box 3. Solar Central Inverter 4. Three Winding Transformer 	60% of total amount of supplied materials as per the Schedule of Prices of Proforma- 3 A shall be paid on pro-rata basis. Mobilisation Advance with interest will be recovered from progressive bills under this payment head.
	ii. After installation and necessary testing of the plant	15% of total amount of the Schedule of Prices of Proforma-3 A shall be paid on pro-rata basis of installation capacity.
	iii. After commissioning of the plant in phases	15% of total amount of the Schedule of Prices of Proforma- 3 A shall be paid on pro-rata basis of plant capacity.
Part B	iv. After successful Trial Run (for at least 30 days) and Final commissioning of the whole plant (subject to submission of completion report and other requisite documents as per clause no. 32 of GCC during handing over the project).	Balance of total amount of the Schedule of Prices of Proforma-
Part C	i. After successful: Completion of contour survey, Soil Testing, Land development (Site grading, levelling, clearing of vegetation etc.) 20% of structural works for boundary wall. Installation of 20 % of Solar PV modules. 50% of structural work for all the buildings. Completion of sub base work for 50% of the total length of the roads. And allied work.	25% of total amount of the Schedule of Prices of Proforma- 3 B shall be paid.

finishing work. Completion of sub base we Total 50% structural and B Completion of road works the road. Completion of foundation structures.	or all the buildings including all ork for all the roads. Trick work for boundary wall in full for 50% of total length of work for all the equipments and tion at both array and switch yard.	Schedule of Prices of Proforma- 3 B shall be paid.
Cable tray / cable sup	on of total 100 % of SPV modules. ports for all the cables as required. on of boundary wall in all respect. the equipments e.g.	Balance of total amount of the
system. Completion of in (Power, control & Completion of ro total length of the Installation of sol Installation of monitoring desk & Installation of We Carrying out of a	ar plant lighting system complete. SCADA system and Plant	

			operation	and	The payment shall be made on quarterly basis and the Eligible amount will be due for payment after the certification by the controlling officer within 45 (forty five) days from the end of each quarter subject to satisfactory performance and submission of maintenance report in regular basis as mentioned in Clause no. 24 of GCC.
Part D	Comprehensive maintenance	Annual			The quarterly amount will be worked out by the controlling officer or his authorized representative by dividing the total quoted Annual Operation and Maintenance Cost for that particular year by 04 (four) i.e. the no. of quarters in a year. Further this quarterly amount payable shall be subject to
					clause no. 25 of GCC document of the tender.

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

The contractor shall submit Invoice in triplicate for release of payment to them.

Gross Value of the invoice (excluding the work of comprehensive O & M) should not be less than Rs. 5,00,00,000/-(Rupees Five Crore Only) except for the final bill.

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

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

Mobilization Advance & Recovery:

10% of Total Schedule of Prices of Proforma- 3 A will be paid to the contractor as mobilization advance after submission of the Bank Guarantee (BG) of 110% of the mobilization advance amount in the prescribed format of WBSEDCL and fulfillment of the following criteria:

- Unconditional acceptance of the LOA
- Taking over of site from WBSEDCL
- Execution of Contract Agreement

- Submission of Performance Bank Guarantee
- Submission of duly authenticated 'Activity Schedule' showing the entire execution of work

The Bank Guarantee shall be valid for a total period of 12 (twelve) months plus a claim period of 3 (three) months.

Mobilization advance, so paid shall be recovered in maximum two installments from Part B of Payment Terms as mentioned in the payment schedule with interest.

Bank Guarantee submitted for mobilization advance will be released after full recovery of the mobilization advance (with interest) and on receipt of written request of the contractor for release of the same.

29. TAXES, DUTIES, LEVIES

• Excise Duty for the items appearing in the Price Bid Proforma (Proforma: 3A - Price Break up - 1st Part) shall be stated as nil/exempted, if excise duty exemptions are available on those items under Office Memorandum No. 30/42/2012/NSM dated 17.01.2013 and subsequent continuation vide Office Memorandum No. 30/20/201-12/NSM dated 01.07.2013 and Office Memorandum No. 22/09/2009-10/St./NSM dated 08.01.2014 of MNRE.

Govt. of India.

- Customs Duty, Additional Duty shall be applicable on concessional basis for eligible items and bidder shall not include the same in the Basic Price for the items appearing in the Price Bid Proforma (Proforma: 3A Price Break up 1st Part). Bidder shall indicate the percentage rate of the aforesaid duties in separate declarations to be submitted with Technical Bid. These have reference to the Notification No. 1/2011 Customs dated 06.01.2011 of Dept. of Revenue, Ministry of Finance, Govt. of India and Office Memorandum of MNRE, Govt. of India as mentioned above.
- Exemption of VAT as per Govt. of West Bengal VAT Act. 2003 on certain solar Photovoltaic and Solar thermal devices etc. vide Kolkata Gazette notification no.-WB (Part-I)/2016/SAR-15(registered no-WB/SC-247) published on 13.01.2016 may be referred during price bid.
- Service tax shall be allowable over & above the quoted price/rate at the prevailing rate and on applicable items on service portion/ abated value as per prevailing rules.
- In case the bidder does not quote separately for Customs duty, Additional Duty and Excise Duty, such bidder shall not be entitled to claim concessional Customs duty, Additional Duty, exemption of Excise duty. Any deviation shall be liable for cancellation of bid.
- The contract price is inclusive of all Taxes & duties but excluding service Tax which will be paid separately at the applicable rate on applicable items. The contractor shall furnish the Service Tax Registration number. Any levies or imposed tax, duties etc. shall not be allowed during pendency of the contract.

No variation in rates excise duty shall be applicable on the items quoted inclusive of excise duty. Any new levies or any new imposed tax, duties, levies etc. shall not be allowed during pendency of contract.

The bidder has to furnish his service tax registration number. Abatement of service tax may be envisaged where service and material element cannot be separated.

30. STATUTORY DEDUCTIONS

All statutory deductions [IT, WCT, Cess, Service Tax (RCM) etc.] will be made from each RA/Final Bill as per applicability of different laws of the land.

32. HANDING OVER

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

- Completion Certificate including 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.
- ii. All as-built drawings, design and manual of the power plant in 06 (six) sets. iii. Operation, Maintenance & Safety Instruction Manual and other information about the project. iv. Detailed Bill of Materials for operation & maintenance, inventory of spares at project site.
 - v. Completion certificate as per prescribed format provided by WBSEDCL.

After submitting all the requisite documents as mentioned above, WBSEDCL will hand over the plant to the contractor for comprehensive operation and maintenance for 5 (Five) years as per clause no. 24 of GCC.

33. CERTIFICATE OF COMPLETION OF WORKS

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

- i. Acceptable quality and workmanship of works.
- ii. Acceptance of field tests by the Controlling Officer or his authorized representative after final commissioning the plant.

34. FINAL ACCEPTANCE CERTIFICATES (FAC)

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

35. HOSTING OF PROJECT DETAIL IN THE WEBSITE

The Contractor shall host information of the project as to be deliverable by them in details into their website prior to the approval from the Chief Engineer, Solar Power Generation Department (SPGD), WBSEDCL 5th floor, B Block, Vidyut Bhavan on the content of the matter to be hosted.

SPECIAL CONDITIONS OF CONTRACT (SCC)

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1. CODES AND STANDARDS

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

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

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

2. RULES AND REGULATIONS

The Contractor shall abide provisions of the following acts & laws strictly:

- a) Employees' Provident Fund and Miscellaneous Provisions Act, 1952
- b) Employees State Insurance Act, 1948 or appropriate medical facilities should be strictly adhered to wherever such Acts become applicable.
- c) Minimum wages to the workers will be paid according to the rates notified and/or revised by the State Government from time to time under the Minimum Wages Act, 1948 in respect of scheduled employments, within the specified time as per law. Payment of bonus, wherever applicable, has to be made

3. SAFETY

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

i. Indian Electricity Rules 2005 ii. Indian Electricity Act 2003 iii. Indian Explosives Manual and iv. Fire Protection Manual issued by Tariff Advisory Committee (India).

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

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

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

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

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

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

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

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

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

Reporting of Accident:

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

Serious Injuries:

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

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

Fatal Accident:

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

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

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

4. CONSTRUCTION POWER

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

5. WATER FOR CONTRACTOR'S USE

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

6. PACKING

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

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

7. TRANSPORTATION

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

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

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

may be caused by the transport of the Plant and Equipment and the Contractor's Equipment to the Site.

8. TOOLS & TACKLES

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

9. ACCIDENT RISK

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.

10. ROAD PERMITS

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

11. STORAGE AT SITE

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

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

12. REPLACEMENT OF DEFECTIVE PLANT OR MATERIALS

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

13. FIELD PROVEN INVERTER

The proposed solar inverter must be field proven in Indian atmosphere. Only those PCUs/ Inverters which are commissioned for minimum 10 MW capacity solar PV projects in India shall be considered for this project with individual Inverter capacity not less than 500 kW and Completion Certificate of the Owner of the plant should be submitted. Also there must be a good maintenance setup of the proposed inverter manufacturer with having sufficient numbers of qualified service engineers (Degree/Diploma engineers) and well equipped set up with instruments, tools and tackles at anywhere in West Bengal. The maintenance setup of the proposed inverter manufacturer may be inspected by WBSEDCL, if required. Necessary test certificates and approvals of the inverters and

documents pertaining to license of the manufacturing firm have to be submitted by the contractor to WBSEDCL with their Detailed Design Report.

14. EQUIPMENT AND MATERIAL

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

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

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

All corresponding parts of similar equipment shall be interchangeable.

Contractor shall carefully check the available space and the environmental conditions for installation of all equipments 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.

15. MATERIALS AND WORKMANSHIP

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

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

16. 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/equipments at manufacturer's workshop. No such activity shall relieve the Contractor from any obligation or responsibility.

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

The contractor shall arrange for all the necessary tests required for the project in the premises of the contractor or Sub-contractor and provide assistance, labour, materials, electricity, fuel, stores, apparatus and instruments as may be necessary to carry out the tests efficiently without any extra

charges. If the facilities are inadequate to carry out tests as per standard, the contractor shall have to arrange suitable testing place having all such required facilities and the cost towards this will be on contractor's account.

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

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

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

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

17. 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.

18. 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.

19. SUPPLEMENTARY/EXTRA WORKS

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

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

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

20. 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.

21. DISPUTES

Dispute(s), if any, shall be settled by mutual agreement through Amicable Settlement and in case of failure the dispute(s) shall be settled through Arbitration.

The parties shall take necessary steps to settle any dispute through mutual discussion with issuing prior notice in writing to other side at least 14 (fourteen) days in advance. If the issue is remained unresolved to the satisfaction of the parties, then the matter may be referred to Arbitration.

The provisions of Arbitration and Conciliation Act 1996 will apply with respect to Arbitration proceedings between the parties.

22. ARBITRATION

The provisions of Arbitration and Conciliation Act 1996 will apply with respect to Arbitration proceedings between the parties.

Each party shall appoint one Arbitrator and third Arbitrator shall be nominated by the said two Arbitrators who shall act as presiding Arbitrator.

The venue of the Arbitration proceedings shall be in the state of West Bengal

The decision of the majority of the Arbitrators shall be final and binding upon both the parties.

The cost of the Arbitration shall be borne equally by the parties.

Any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below.

The Owner and the Contractor shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within 28 (twenty eight) days after the latter of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority for arbitrator.

If for any reason an arbitrator is unable to perform its function, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws and a substitute shall be appointed in the same manner as the original arbitrator.

The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or claims of immunity from such enforcement.

The arbitrator(s) shall give reasoned award.

Notwithstanding any reference to the arbitration herein

i. The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree. ii. The Owner shall pay the Contractor any monies due to the Contractor except for the woks referred to the Arbitrator

23. JURISDICTIONAL MATTER

Either party may approach Court of law if any of them is aggrieved by the award of the Arbitration proceedings.

All litigation matters between the parties if any shall be held in any Court in Kolkata under the superintendence of High Court Calcutta.

24. 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.

25. 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.

26. SURVEILLANCE

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

After final commissioning of the plant, arrangement of security (minimum 1 no. of armed security guard and 3 nos. of security personnel in each of the three shifts) shall be a scope of the operation and maintenance.

PTZ (Pan-Tilt Zoom) outdoor camera as per requirement shall be deployed to cover the whole plant with night vision and central monitoring through 40" LED monitor/TV for surveillance during construction as well as after commissioning of the plant.

27. CLEARING SITE ON COMPLETION

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

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

28. TRAINING FOR WBSEDCL PERSONNEL

The Contractor shall arrange training program at site for WBSEDCL personnel. The duration of the training program shall be minimum 07 (seven) days. The contractor shall provide training materials

at least 07 (seven) days before commencement of training programme. The training shall be the part of contract and no extra amount shall be provided for organizing the training programme.

TECHNICAL SPECIFICATION (CIVIL WORKS)

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All civil works shall conform to the latest Indian standards, codes etc as where applicable or to equivalent applicable international standards approved by the engineer-in-charge. Civil works include but not limited