

**THE STATE TRADING CORPORATION OF INDIA LIMITED
BIDDING & CONTRACT DOCUMENTS**

Supply, Installation, Testing & Commissioning of 60 KWp Grid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Connaught Place, Delhi

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The State Trading Corporation of India Ltd.

(A Public Sector Undertaking)

NOTICE INVITING TENDER- E Tender Process

Tender Ref :- STC/JVB/BPMD/CME/D 616/ Dated 27/10/16

1. Bids are invited in two part bidding process online (**e-tendering process**) via open tender process from competent firms, for the work of Supply, Installation, Testing & Commissioning Of Grid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Delhi.

2. The bids have to be submitted on-line only.

Sr. No.	Particular	Details
1	Bid issue and filling site	www.eprocure.gov.in
2.	Tender document fee	Rs.5000.00 (including VAT)
3.	Tender floating date	27/10/16
4.	Last Date of issue of tender from STC	17/11/16 up to 3:00 pm
5.	Last Date and time of submission of scanned tender documents with all necessary documents in the e tender portal, physical submission of financial instrument.	17/11/16 up to 3:00 pm
6.	Date and time of opening of tender (Technical Bid-PartI)	17/11/16 at 3:30 PM
7	Venue of opening	eprocure.gov.in.
8	Date and time of opening of Price Bid of tender (Part-II)	Shall be intimated later to the successful bidders in technical bid.
9.	Amount of earnest money to be deposited (EMD) (By DD/ Banker's Cheque)	1,00,000=00

10.	Submission of EMD and non-refundable bidding fees	Tender box kept on reception of Jawahar Vyapar Bhawan, Tolstoy Marg, New Delhi- 110001, , put in an envelope subscribing name of the contractor prior to closing time of bid
11.	Contact Person details	R.K. Avasthi Chief Manager-Elect. Ph-011-23462400 Mob-8743828103

Note :-

1. Any Deviation from tender conditions shall result into technical disqualification.
2. All the tender documents should be signed by the bidder as a token of acceptance and shall be submitted in PDF format on line in two packet system.
3. If the dates mentioned above happens on a Holiday in STC, the next working day shall be considered as mentioned date.
4. This tender document is not to be treated as an offer.

The State Trading Corporation of India Ltd.

(A Public Sector Undertaking, G.O.I.)

Instruction for filling the e tender

- 1 Bids are invited via open tender enquiry process for Supply, Installation, Testing & Commissioning of 60 KWpGrid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Delhi
2. Bids have to be submitted on line only via <http://eprocure.gov.in/eprocure> (the e-procurement portal of NIC (eprocure.gov.in/eprocure). No bids shall be accepted in hard copy or any other form.
3. For submission of e bids, bidders are required to get them registered with NIC's central Public Procurement (CPP) portal (<http://eprocure.gov.in/eprocure>) using class-II/Class -III digital signature certificate. All the details mentioned during registration / enrolment process should be correct / true. Bidders have to abide by all the terms and conditions mentioned during registration process.
4. Any Financial instrument such as tender fee, earnest money deposit (EMD) and which are required to be submitted in the desired form must reach STC before closure of the tender. The details of financial instrument entered during the e bid submission should tally with those submitted physically. Otherwise, the bid may be rejected.
5. The bidders are required to upload soft copies of all relevant documents.
6. Bidders are advised in their own interest to submit the on line bids well before the bid document submission end date and time (as per server system clock of CPP). STC shall not be responsible for any delay or the difficulties encountered during submission of bids at the eleventh hour due any technical or other problems.
7. For any queries relating to the process of online bid submission or queries relating to Procurement Portal (eprocure.gov.in), the bidders may contact CPP Portal Helpdesk on Tel No's.: 1800-3070-2232, 91-7878007972, 91-7878007973, 91-7574889871 and 91-7574889874.
8. Bidders may regularly visit STC website for any information / clarification / addendum / corrigendum etc. related to this tender, processing of bids received,

award of job, pre bid meet decisions etc. STC shall not be liable to send any individual information or publish a public notice for any further information regarding this tender in newspapers.

9. Portal for Online Submission www.eprocure.gov.in

10. Bid Copies along with supporting documents to be submitted : Online

11.. Following documents are required to be uploaded online of the bid:

Scanned copy of all the documents as required for bid submission

Scanned copy of demand draft/ banker' s cheque toward bidding fee

Scanned copy of demand draft/ banker' s cheque towards EMD

12. A bidder may modify, substitute or withdraw its e-bid after submission before the last date and time of bid submission. No bids shall be modified, substituted or withdrawn by the bidder on or after the last date and time of bid submission. For modification of e-bids, bidder has to detach its old proposal from e-tendering portal and upload/resubmit digitally signed modified bid.

13. STC may ask the bidders to submit any or all the documents in original submitted as part of their online bid anytime during the bid process

14. If there is a discrepancy between words and figures, the amount in words shall prevail. However, where the amount expressed in words does not represent arithmetically correct total, the amount in figures shall prevail.

15. It shall be the bidder's responsibility to ensure that adequate documentary proof is provided in the bid for each of the technical evaluation

16. The bid document available on e- procurement portal shall be taken as final

DEFINITIONS

1. “Application” shall mean the request submitted by interested parties for obtaining the bid document.
2. ‘Bid/Tender” shall mean documents issued by STC to the prospective bidder.
3. “Bid Security/Earnest Money/EMD” shall mean the amount to be deposited by the Bidder with the Bid.
4. “Bid Validity” shall mean the period for which the Bids shall remain valid.
5. “Bidder” shall mean the party participating in the Bidding process pursuant to and in accordance with the terms of this document.
6. “Contract Agreement” shall mean the agreement to be signed between the successful bidder and the nominee of the competent authority on behalf of STC.
7. “Contract Price” shall mean the financial bid of the successful bidder as accepted by the STC.
8. “Date of commencement of work” shall mean the date of start as communicated by Letter of work order.
9. “Defects Liability Period/Maintenance Period” means the period after completion of the contract during which the STC or his authorized representative/Engineer-in-charge will notify to the Contractor any defect noticed in the work and the contractor is liable for, replacing or repair the same as provided under the Terms of the Contract/ Document. Proof of dispatch of letter notifying the defect/intimating the representative of Contractor at site on the last date of Defect Liability period will make the contractor liable for rectifying all such defects.
10. “Engineer in Charge (EIC)” means the authorized representative nominated by STC.
11. “Tender Evaluation Committee” shall mean the committee constituted by STC for the evaluation of the bids.

12. "Letter of Award/Notification of Award" shall mean the letter issued by the STC to the successful bidder inviting him to sign the contract agreement.
13. 'STC' shall mean The State Trading Corporation of India Open having its registered office at Jawahar Vyapar Bhawan, Janpath, Connaught Place, Delhi
14. The Contractor shall mean the sole proprietor, or contractor or company whether incorporated or not, undertaking the works and shall include the legal representative or such individual successors, heirs, administrators or assignees of such sole proprietor, contractor or company, as the case may be or the persons composing such contractor or company of the successor of such contractor or company and the permitted assignees of such individual or contractors or contractors or company.
15. Engineer-in-charge shall mean the officer designated by STC who shall Supervise and in charge of the work, and issue necessary instructions at site, on behalf of STC.
16. "Performance Security/Performance Bank Guarantee" shall mean the amount to be paid by the successful bidder as per relevant clause mentioned in the tender document.
17. "Work" means Supply, Installation, Testing & Commissioning of 60 KWp Grid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Connaught Place, Delhi
18. "Site" shall mean the place where the works under the Contract are to be carried out and the details of which are provided in this document.
19. "Successful Bidder" shall mean the bidder who has been declared technically qualified and the bid has been accepted by competent authority of STC. The successful bidder has to sign the contract agreement.
20. "Scheduled Banks" mean Scheduled Commercial Banks of Govt. of India.
21. Order placing authority means: - The officer who is issuing or Placing detailed work order to the contractor.
22. "B.I.S" shall mean specifications of Bureau of Indian Standards (BIS);
23. "CEA" shall mean Central Electricity Authority
24. "Chartered Accountant" shall mean a person practicing in India or a firm

whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act,1949;

25. **“Commissioning”** means Successful operation of the Project / Works by the Contractor, for the purpose of carrying out Performance Test(s) as defined in RFS
26. **“Capacity Utilization Factor” (CUF)** shall mean the ratio of actual energy generated by SPV project over the year to the equivalent energy output at its rated capacity over the yearly period.
*CUF = actual annual energy generated from the plant in kWh / (installed plant capacity in kW * 365 * 24).*
27. **“IEC”** shall mean specifications of International Electro-technical Commission
28. **“kWp”** shall mean kilo-Watt Peak;
29. **“kWh”** shall mean kilo-Watt-hour;
30. **“MNRE”** shall mean Ministry of New and Renewable Energy, Government of India;
31. **“O&M”** shall mean Operation & Maintenance of Rooftop Solar PV system for 5 years;
32. **“Owner of the project”** shall mean anyone who has ownership (including lease ownership also) of the roof and is the legal owner of all equipment of the project. Owner of the project can enter into a PPA with the consumer (s) of power for supply of solar power for at least 25 years from the date of Commissioning of project
33. **“Project capacity”** means Capacity in kWp offered by the Bidder for each State consisting of single or multiple roof tops. The project capacity specified is on “DC” output Side only
34. **“Performance Ratio” (PR) means**
“Performance Ratio” (PR) means the ratio of plant output versus installed plant capacity at any instance with respect to the radiation measured. $PR = (\text{Measured output in kW} / \text{Installed Plant capacity in kW} * (1000 \text{ W/m}^2 / \text{Measured radiation intensity in W/m}^2))$.

35. **“RESCO”** shall mean Renewable Energy Service Companies

36. **“Subsidy”** shall mean *15% (or latest applicable subsidy / incentive as per MNRE)* of Project Cost quoted by the Successful Bidder for a (Location /State) sanctioned by MNRE, Govt. of India and disbursed by STC

37. **“Wp”** shall mean Watt Peak

38. **Site** shall mean the place where the works under the contract are to be carried out and details of which are provided in the document.

Criteria for technical evaluation

Following self-attested scanned documents must be uploaded with technical bid for technical evaluation:

Name of Work - Supply, Installation, Testing & Commissioning of 60 KWp Grid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Connaught Place, Delhi

GENERAL

(A) The Bidder should be either a body incorporated in India under the Companies Act, 1956 or 2013 including any amendment thereto and engaged in the business of Solar Power.

2. Technical capability

(a) The Bidder should have installed & commissioned at least one Grid connected Solar PV Power Project having a capacity of not less than 60 kWp which should have been commissioned at least six months prior to Techno-Commercial Bid Opening date. The list of project commissioned at least 6 months prior to Techno-Commercial Bid Opening date, indicating whether the project is grid connected, along with a copy of the Commissioning certificate and Work order / Contract / Agreement/ from the Client/Owner shall be submitted.

(b) The bidder should be ISO certified

(c) The bidder should be MNRE/Solar energy corporation of India Ltd. (SECI) empanelled channel partners/ vendor under Grid-Connected roof top Solar Power Plant

Similar work means the work of Supply, Installation, Testing & Commissioning Of Grid Connected Roof Top Solar PV System in any Govt. / Semi Govt. /PSU / State Govt. / Autonomous Bodies.

(d) The offered equipment have to be designed, manufactured and tested as per relevant IS/IEC with latest amendments

The bidder will have to produce satisfactory performance report of the above work experience from order placing authority or higher.

3. Financial capability

The bidder should be financially capable for execution of the work as per NIT specification.

For this purpose:-

(1) Bidder should have positive net worth and profitable during last 3 financial years. Documentary proof (balance sheet and Profit and loss account) to be submitted. The balance sheets should be properly authenticated by Chartered Accountant

(2) The average annual financial turnover should be at least 1Cr. during last 3 consecutive years or atleast 2Cr. in any of the three financial years.

(3) The bidder should enclose the Earnest money (E.M.D.) of an amount of Rs. 1,00,000=00 and Rs. 5000=00 as tender fee (including VAT) in the form of Crossed Bank Draft / Bankers Cheque payable to “The State Trading Corporation of India Ltd” payable at New Delhi at the time of bidding.

(C) Statuary Compliances: - Bidder should upload self-attested scanned copies of the following

1. Service tax registration
2. TIN No.
3. PAN No.
4. Certificate of Non-Blacklisting /debaring from PSU/Govt. / MNC as per tender Document
5. Third party insurance (after awarding the work)
6. PF registration

General Contract Conditions Section "A"

INSTRUCTION TO BIDDERS:-

DEFINITION: - The term 'Corporation' wherever appearing in this specification would mean The State Trading Corporation of India Ltd. and shall include the nominated person authorized to place an order this specification.

1.0 PREPARATION OF TENDER:-

1.01 Before submission of the tender, the Bidders are requested to have themselves fully conversant with the "Pre-Qualification Criteria "specification, nature of work, the site conditions and general conditions of contract etc., so that, no ambiguity arises at a later date in this respect. They may visit the site for seeing the actual working conditions and the nature of work. STC will not be responsible for any ambiguity at later stage.

1.02 Only such contractors need to submit bids which meets the criteria as laid down in the tender documents and those can submit satisfactory evidence in that regard.

1.03 The Corporation reserves the right to revise, amend or cancel the tender at any stage of tendering process & also the right to postpone the date for opening of tender without assigning any reason.

1.04 If the Bidder deliberately furnishes wrong information in his tender, the bid would be liable to be rejected out rightly at any stage and the security deposit and/or EMD/ Dues to STC, shall be forfeited

1.05 Tender document are not transferable. JV (Joint Ventures) contractors are not allowed to participate in the tender.

1.06 No contractor shall be allowed to submit more than one bid either solely or through partnership in other firm. Such contractor shall be debarred for bidding in STC for 2 years. The dues to STC shall be forfeited.

1.07 The Corporation shall not be liable for expenses incurred by the Bidder in the preparation of the tender whether his tender is accepted or not.

1.08. Bids containing any alterations/cuttings/marks of eraser etc even if accompanied by signature shall be liable to be rejected on such grounds.

1.09 Successful L-1 bidder shall be decided on the basis of method specified in price bid, if no method is specified, decision of L-1 will be done on the basis of total price quoted in the price bid section.

1.10 Tenders submitted by courier/post liable/ manual submission shall be rejected. Only electronic submission is accepted.

1.11 Partial bidding shall be rejected.

1.12 The tender is to be furnished in two parts i.e. PART-I (Techno-commercial bid) & PART-II (Price Bid); All the tender document digitally signed accompanied by documents in support of pre-qualifying requirement / tender enquiry , scanned copy of financial instrument (for EMD and tender fee) should be uploaded to the <http://eprocure.gov.in/eprocure>

1.13 The Part-I i.e. Techno-commercial Bid will be opened on the scheduled date and time .

1.14 The bidder whose Part-I (Techno- Commercial bid) bids have been found acceptable, shall be intimated through written communication and / or through telephonically as the case may be. The price bid of these technically qualified bidders shall be opened on the scheduled due date and time on line.

1.15 Intimation regarding date, time of opening of price bid shall be intimated on line to the technically qualified bidders.

1.16 STC reserves the right to accept or reject any bid, and/or to annul the bidding process and reject all bids, at any time prior to award the contract, without thereby incurring any liability from the affected bidder or bidders nor shall STC have any obligations to inform the affected bidder or bidders of the grounds for STC's action.

1.17 STC reserves the right to nominate or replace the Engineering in charge during the currency of contract period or during the tender process.

2.0 Earnest Money Cost of tender document:-

2.01 Before submitting the tender, the Bidder shall deposit an amount as indicated on cover page as earnest money, the cost of tender document in the form of crossed Bank draft / Bankers Cheque payable to the State Trading Corporation of India Ltd payable at New Delhi.

2.02 Any tender not accompanied with EMD and fee of tender document, is liable to be rejected. The bidder has to upload the scanned copy of EMD, tender document fee online and physically submit the EMD, tender document fee in the tender box placed at the reception before /on the tender closing date.

2.03 In case of unsuccessful bidders the earnest money will be refundable on application after award of work to the successful bidder.

2.04 Request for adjustment/appropriation of earnest money/deposits if any already lying with the Corporation in connection with some other tender/orders/works shall not be entertained.

2.05 No interest shall be payable on earnest money deposits.

3.0 General Terms:-

3.01 The Corporation is not liable to accept the lowest or any other bid and shall not assign itself to accept the lowest or any other tender and will not assign any reason(s) for the rejection of any tender or a part there of.

3.02 The tenderer shall treat the details of specification and other tender documents as and confidential and they shall not be reproduced anywhere without the written authorization of the Corporation.

4.0 RECEIPT OF TENDERS:-4.01 The tenders should be filled on-line as detailed above. No other form of tender submission shall be accepted.

5.0 DEVIATIONS:-

5.01 Bids containing deviations from the specifications and general condition of contract shall be liable to be rejected.

6.0 SUBMISSION OF DOCUMENTS ALONG WITH THE BID

6.01 Part-I deals with technical and commercial particulars and performance of the bidders. The Bidder shall upload all required documents as prescribed in the tender document , pre-qualifying requirement ,scanned copy of signed tender document , scanned copy of financial instrument except price bid with part I, duly digitally signed, acknowledging his acceptance to the terms and conditions of tender.

6.02 Part-II shall be only the “Price Bid Section”. The successful bidders in techno commercial evaluation shall be intimated by the Corporation. Price bid shall be opened of only those successful bidders who qualify in techno commercial evaluation.

7.0 VALIDITY OF TENDER:-

The bid shall remain valid for 90 days which will reckon from the date of opening of technical bid. Bids once opened cannot be withdrawn by the bidder at any stage. Bidders mentioning a shorter validity period than specified are liable to be rejected. In case validity period is not stated it will be presumed that the bid is valid for 90 days without obtaining any confirmation from the bidder.

8.01 CANVASSING: -

No Bidder shall canvas any, Corporation official or the Engineer with respect to his or other tender. Contravention of the condition will invoke in rejection of the tender.

FORMS OF TENDER

The Chief Manager (E)
STC of India Limited,
Jawahar Vyapar Bhawan
1-Tolstoy Marg, Janpath
New Delhi - 110 001

Ref :- Supply, Installation, Testing & Commissioning Of 60KWp Grid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Delhi

I/We hereby tender for the execution of the work specified in the under-written memorandum within the time specified at the rates specified therein on item rate basis and in all respects, in accordance with the specifications, drawings, design and instructions supplied in writing by the STC and with such materials as are provided for and in all respects in accordance with such conditions so far as possible.

General description	Tender for "Supply, Installation, Testing & Commissioning Of Grid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Delhi
Earnest Money (interest free)	Rs. 1,00,000=00, EMD is Refundable on request, after ward of work.
Total security deposit (interest free)	5 % of the awarded contract value.
Performance Bank Guarantee	5 % of the awarded value of the contract , as per STC format
Period of completion	3 months from the date of issuance of Letter of award

1. I/We hereby distinctly and expressly declare and acknowledge that before the submission of my/our tender, I/We have carefully followed the general instructions and read the detailed specifications and schedule of quantities and clearly understand all the conditions of the contract.
2. I/We have seen the location where the said work is to be done and made such investigations of work required in regard to the materials required to be furnished as to enable me/us to complete the work successfully should this tender be accepted in whole or in part.
3. I/We hereby agree to abide by and fulfill all the terms and conditions annexed hereto. To execute, all the works referred to in the tender documents upon the terms and conditions contained or referred to there in and carry out such deviations as may be ordered at the rates quoted in the tender documents.
4. I/We agree that my/our earnest money shall stand forfeited otherwise if I/We fulfill the condition and start the work the said earnest money shall be retained by STC towards security deposit.
5. I/We agree to keep the offer valid for 90 days (3 months) from the date of opening of price bid.

I/We/am/are

Yours faithfully,

(Bidder)

PROFORMA - I
Letter for submission of bid

From : -----

To

The Chief Manager (Elect.)
Building Project and maintenance Division,
STC of India Ltd.
Jawahar Vyapar Bhawan
1, Tolstoy Marg, New Delhi-110001.

Sir,

1. I have examined the conditions as incorporated in the Tender documents for the Execution of work and having visited and examined the site of said work, I/we the undersigned, offer to execute the said works in conformity with the conditions of tender,

2. Should this tender be accepted I/We undertake to commence the work within seven (7) days of issue of the Letter of award for the said work and further undertake to perform whole of the work comprised in the contract for a period of 03 months within the period specified under tender documents.

3. I/We agree to abide by this tender for a period of **90 days** from the date of opening of Bid or such extended period as may be mutually agreed as prescribed in Instruction to Bidders and shall remain binding upon us .

4. A sum of Rs 1,00,000=00 (Rs One Lakh only) towards Earnest money Deposit in the form of Demand Draft/ Pay Order/Banker's Cheque Bearing No. _____ Drawn on _____ Dated _____ in terms of the Instruction to Bidders enclosed in scanned form on line with Technical Bid and has been physically deposited in STC before the bid opening time.

5. Unless and until an agreement is prepared and executed, this bid together with STC's written acceptance thereof shall constitute a binding contract between us.

6. We understand that STC is not bound to accept the lowest bid and that STC reserve the right to accept or reject any bid, and/or to annul the bidding process and reject all bids, at any time prior to award of contract, without thereby incurring any liability from the affected bidder or bidders nor shall STC have any obligations to inform the affected bidders of the grounds for STC's action.

Name of the representative of the contractor to sign:

(a)-----(b)-----

Or

Name of person having power of attorney to sign the contract (**certified true copy of the Power of attorney should be attached**)

Yours Faithfully,

Signature of the Bidder

Permanent address -----

Complete details of the dealing person name and address with designation

Note : The contractor is to fill up the blanks in above form before signing & submitting the bid. This application is made with full understanding that:

1. Bids submitted by bidders will be subject to verification of all information furnished for pre-qualification during the bidding process.

2. STC reserves the right to amend the scope and value of any contracts bid under this work.

Signature of Authorized representative of the bidder with stamp

PROFORMA - 2

Letter for Unconditional acceptance of Bid Conditions

No.

Date:

The Chief Manager (E)
Building Project and Maintenance Division
The State trading Corporation of India Ltd.
Jawahar Vyapar Bhawan,
1-Tolstoy Marg,
New Delhi-110001.

Subject: - Unconditional acceptance of Bid Conditions for tender

Dear Sir,

1. I/We have read and examined the site and understood all the conditions in the bid documents for the subject work and we hereby unconditionally accept the bid conditions entirely for the said work.

2 I/we hereby submit our bid and undertake to keep it valid for a period of 90 days from the date of opening of bid

3. I/we undertake to execute the above items strictly in accordance with the requirements and particulars /Specifications stipulated in the bid documents.

4. I/we hereby further undertake that during the said period:

(A) I/we shall not vary/alter or revoke my /our bid during the validity period of Bid.

(B) I/we have quoted for the complete scope of the said work

(C) I/we undertake to abide by the terms and conditions as stipulated in STC bid documents and as amended thereafter before award of work.

(D) I/We have not enclosed any condition/deviation to conditions of Bid documents in the envelope containing Price Bid.

5. I/we agree that in an event of conditional bid, the bid is liable to be rejected without assigning any reason whatsoever and the Earnest Money deposit is liable to be forfeited.

6. This undertaking is in consideration of STC agreeing to open my bid, considering and evaluating the same for the purpose of award of work in terms of provision of bid documents.

I submit EMD of Rs...1,00,000=00 through Bank draft/ Banker” cheque No. -----
----- dated ----- issued by -----
----- (Name of Bank) along with the Technical Bid.

Signature along with seal of the company of the signatory duly authorized to sign the Bid on behalf of the Contracto

Name -----

Designation-----

Name of Company-----

Date and Postal address-----

Witness:

Signature_____

Date_____

Name and address & Telephone No._____

PROFORMA – 3

Performa for submission of past contractual performance/declaration by the bidder

It is submitted that:-

1. We have not made any misleading or false representation in the forms, statements and attachments in proof of the Pre-Qualification requirements.
2. We do not have records of poor performance such as abandoning the work, not properly completing the contract, inordinate delays in completion, litigation history or financial failures etc.
3. Our business has never been banned/ Blacklisted by any Central/State Govt. department/Public Sector Undertakings or Enterprises of Central /State Govt.
4. We have submitted all the supporting documents and furnished the relevant details as per the prescribed format.
5. The information and documents submitted with the tender by us are correct and we are fully responsible for the correctness of the information and documents submitted by us.
6. We have not submitted fraudulent document/information either in present or past tenders.

Signature of Authorized representative of the tender

Bidder's stamp

ARTICLES OF AGREEMENT

This agreement made on the ____ day of _____, Two thousand between “The State Trading Corporation of India Open” (hereinafter referred to as the Client) and whose registered office is located at Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Janpath, New Delhi -110001 on the one part and M/s. _____ (hereinafter referred to as the Contractor) and whose registered office is located at _____ ----- on the other part, whereas the Client desires certain works to be executed by the contractor viz. “ _____” in considerations of the amount of Rs. _____ (Rupees _____ in words) and subject to such terms and conditions as set out in the tender documents (Tender No. _____ dated _____) which shall form part of the contract.

Whereas the Contractor has agreed to keep STC indemnified at all times against any claims/liabilities/proceedings etc from any third party or otherwise arising out of/or in connection with the tender documents.

Whereas in consideration of the payments to be made by the Client to the Contractor as hereinafter mentioned the contractor hereby agrees with the Client to perform the services in conformity with the provisions of the agreement.

Whereas the Client agrees to pay the contractor in consideration of the performance of the services such amounts as may become payable under the provisions of the agreement at the times and in manner prescribed by the agreement.

NOW THIS AGREEMENT WITNESSED AS UNDER

That the terms and conditions in the tender documents and award letter No. _____ dated _____ will form part of the agreement and shall be binding on both the parties.

In witness where of the parties have caused this agreement to be executed on the day and year first above written.

Binding Signature of the Contractor

Binding signature of the Client

In the presence of :

Name:

Name:

Designation

Designation

(Stamp Paper in the name of the Bank)

Schedule 'B'

PERFORMANCE BANK GUARANTEE FORMAT

(To be executed by any Nationalized Bank in India having their Branch in the State of End-user Department on stamp paper of Rs.100/-)

Name & Address of the Buyers (End-user Department)

1. Against Tender No. _____ dated _____ and Contract No. _____ Dated - _____(hereinafter called the Contract entered into between the STC of India Ltd., New Delhi which expression shall, unless repugnant to the context or meaning, thereof include its successors, representatives & assigns for and on behalf of _____ (hereinafter called the Buyers/End user Department) and M/s. _____(Name and Complete Address) (hereinafter called the Sellers) which expression shall, unless repugnant to the context or meaning, thereof include its successors, representatives & assigns this is to certify that at the request of the Sellers, we _____ Bank unconditionally and irrevocably guarantee to pay to the Buyers immediately on first demand, the amount of Rupees _____(@ 5% of contract value) without any protest or demur or reference to the Sellers if the Sellers fail to perform all or any of their obligations under the said contract. The decision of the Buyer/End user _____or The STC of India Ltd., New Delhi duly communicated in writing to the bank that the sellers have failed to perform all or any of the obligations under the contract shall not be questioned and be final and conclusive. The said amount of Rupee _____ will accordingly forthwith be paid without any conditions or requirement of our proof whatsoever failing which interest @ 15% p.a. on monthly rest basis shall be payable by the Bank to Buyer.
2. It is fully understood that this guarantee is effective for a period up to _____ (completion period + 60 days) and that we _____ Bank undertake not to revoke this guarantee during its currency (up to claim period) without the consent in writing of the Buyers.
3. We _____ Bank, further agree that the buyer shall have the fullest liberty, without affecting in any manner or obligations hereunder to vary/extend any of the terms and conditions of the said contract or/extend time of performance by the Sellers from time to time or to postpone for any time or from time to time any of the powers exercisable by the Buyers against the said sellers and/or forebear to enforce any of the terms & conditions relating to the said contract and we, _____ Bank shall not

be released from its liabilities under this guarantee by reasons of any such exercise, variations or extension being granted to the said sellers or for any forbearance and/or commission on the part of the buyers, or any indulgence by the Buyers, to the said Sellers or by any other matter or thing whatsoever which under the law relating to the sureties would, but for this provision have the effect of so releasing us from our liability under this performance guarantee. We further agree that the validity period of this Performance Bank Guarantee will be extended by us upon receipt of any such request in writing from the Buyer and any charges on account thereof shall be to the account of seller

4. We _____ Bank further agree that the guarantee herein contained shall not be affected / discharged by any change in the constitution of the said Sellers/Buyers/Bank.
5. The Guarantee will be governed by Indian Laws and will be subject to the jurisdiction of competent courts in the State of Buyer / End - user India alone.
6. No claim shall be admissible against the Buyer in respect of interest on Performance Guarantee regardless of the time of release.
7. The Bank further agrees that decision of the Buyer as to the failure on the part of - _____to fulfill their obligations as aforesaid /or as to the amount payable by the bank to the Buyer shall be final, conclusive & binding on the Bank.
8. This Guarantee will remain in force up to _____(completion period + 60 days) and any demand in respect thereof should reach Bank not later than 10 (Ten) working days (claim period) from the expiry of above validity date.
9. Notwithstanding anything entered hereto Banks liability under this Performance Bank Guarantee shall not exceed _____(in words. Bank is liable to pay the guaranteed amount if Buyer same upon in written claim/demand on of before the expiry date.

FOR _____ BANK ACCEPTED Witness:-

GENERAL CONDITONS OF CONTRACT- SECTION B

1.0 CONTRACT DOCUMENT

1.1 The terms Contract Document means the Notice Inviting Tender, Tender Form, Instructions to Tenders, Special Conditions, General Conditions of Contract, Specifications, Price Schedule of Quantities, Scope of work, scope of supply and Drawings and Articles of Agreement and all other items mentioned in the Index page.

2.0 COMPETENCY:

This is an open tender enquiry. The bid has to be signed by the person authenticated by the contractor on all pages with seal of the contractor firm. The entire tender document would form part of the contract till the formal agreement is not executed between STC and contractor.

3) INSPECTION OF SITE

Any site information given in this document is for guidance only. The Bidder is advised to visit and examine the Site of works and its surroundings at his/their cost and obtain at his/their own responsibility, any information that may consider necessary for preparing the Bid and entering into a Contract with the Client, including availability of electricity, water and drainage, where applicable. The contractor is free to raise any clarification /doubts regarding scope of work/ scope of supply etc . STC shall not be liable for such costs, regardless the outcome of the selection process.

4) ENTRIES

All the entries in the tender documents must be in English. They must be hand written in ink only. Any tender in whom there is over writing or marks of erasure is liable to be rejected. Tender containing any alterations/cuttings/marks of erasers etc. even if accompanied by signatures shall be liable to be rejected on such grounds. Price Bid to be filled up in figure and words for rate and amount of each item. The mode of bid submission is on-line only

5) ADJUSTMENTS

All compensation or other sum of money payable by the Contractor under the terms of the contract may be deducted from or adjusted against his security

deposit, against any sum which may be due or become due to the Contractor by STC on any account whatsoever. Bidder who proposed any alteration in the work specified in the said form of invitation to tender or in the time allowed for carrying out the work or which contains any other conditions of any sort shall be liable to rejection.

6) REJECTION OF TENDER

The Contractor shall fill in the rates tendered in figures as well as words. The amount of each item should be worked out and the requisite total given. The bidders who do not fulfill these requirements, their tender is liable to be summarily rejected.

No alteration made by the bidder in the notice of tender, instructions to the Contractors, in the contract form, in the conditions of contract, in the drawings, in specifications or in quantities accompanying the same shall be recognized, and if any such alterations are made or any special conditions are attached, the tender is liable to be rejected.

STC reserves the right to accept or reject any bid and/or to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability from the affected bidder or bidders nor shall STC have any obligations to inform the affected bidder or bidders of the grounds for STC action.

7) CHECK RATES & FIGURES

If on check and verification differences are found between the rates given by the contractor in words and figures or in the amounts worked out by him, the following procedure shall be followed:

7.1 Where there is a difference between the rates in figures and words, the rate which correspond to the amount worked out by the contractor shall be taken as correct.

7.2 Where amount of the item is not worked out by the Contractor or it does not correspond the rate written either in figures or in words then the rates quoted by the contractor in words shall be taken as correct and amount shall be worked out accordingly.

7.3 Where rates quoted by the contractor in figures and words tally but the amount is not worked out correctly. The rates quoted by the contractor shall be taken as correct and not the amount.

8) NON RECOGNITION OF UNWARRANTED CLAIMS

The contractor shall not in any case after acceptance of a contract rate, be paid any; extra charge for lead involved in transport of materials to site, Installation and hire of T & P sheds.

For materials, in case the sources of materials available. All taxes including octroi toll or sales tax or any other taxes etc. shall be payable by the contractor and no claim whatsoever in this respect shall be entertained.

9) CANVASSING

Any canvassing in any form in connection with the tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing shall be liable to rejection.

10) AUTHORIZED OFFICER

If the headquarters of the successful bidder are elsewhere other than in Delhi, he shall have to nominate /depute a duly authorized officer in Delhi from the date of commencement of the work until the work is completed. This officer will coordinate with STC for day today works and will primarily carry out the works under his supervision .Such officer(s) will be authorized to act on behalf of the successful bidder.

11) DEPLOYMENT OF TECHNICAL & OTHER STAFF

The contractor shall deploy the qualified personnel such as project Engineer having experience in related work for the execution of the work .In case, the contractor fails to deploy proper technical staff as aforesaid, he shall be liable to pay to STC of India at the rate of Rs.5000/- per week (Five thousand) for Project Engineer.

12) REPLACEMENT /RECTIFICATION IN CONTRACTOR ADDRESS

Any notice under the Contract shall be deemed to have been served on the successful bidder if served upon his authorized officer or sent by registered letter at his known address. Contractor's authorized officer shall not be changed and shall not leave during the duration of the contract, unless prior consent of the STC . If the STC require the contractor to carry out any replacement/rectification

under terms of the contract either during the currency of the contract or after the works are completed, but before the expiry of the Defect Liability Period, the contractor or his duly authorized agent shall carry out the same.

13) SUBLETTING

No part of the contract shall be sublet without the written permission of the Engineer-In-Charge STC.

14) CO-ORDINATION

The successful bidder shall co-ordinate and co-operate with all other agencies appointed by the STC so that the work shall proceed smoothly with least possible delay and to the satisfaction of the STC. Work shall be carried out in such a manner that the work of other agencies operating at the site is not hampered due to any action of the contractor. Proper co-ordination with other agencies will be contractor's responsibility. In case of any dispute, the decision of STC shall be final and binding on the contractor.

15) ACKNOWLEDGEMENT OF ACCEPTANCE

The bidder whose tender is accepted will acknowledge the consent of the order within a week's time from the date of receipt of such a written order, intimate to the Engineer-in-charge of his acknowledgement. Bidder's failure to furnish such acceptance within the stipulated time shall give right to the Engineer-in-charge to revoke the acceptance of tender without any further notice to bidder.

16) SIGNING OF CONTRACT AGREEMENT

After acceptance of the tender, the bidder shall sign the necessary contract agreement within 15 days of the detailed work order. In case of delay, the earnest money may be forfeited and the tender may be cancelled at the discretion of the STC.

17. SAFETY CODE, LABOUR CAMPS SANITARY ARRANGEMENTS

The contractor shall follow the Safety Code and Model Rules for the Protection of health and sanitary arrangement for workers as prescribed by the CPWD as regard to safety code and first aid facilities. Contractor shall be fully responsible for safety of his workers and in case of any accident/mishap the entire responsibility shall be on the contractor.

Deterrent penal and legal action shall be taken in the event of any failure on the part of the contractor to discharge the safety obligations as determined by the STC.

18. PAYMENT OF WAGES BY THE CONTRACTOR

The contractor shall directly pay to labour employed by him and shall be solely responsible for following all Government rules and regulations applicable for employment.

19. REMOVAL OF PERSON

The Engineer-in-charge may require the contractor to remove from the site of the work any person or persons in the contractor's employment who have been found to be incompetent or due to misconduct and the contractor shall forthwith comply with such requirement/instructions.

20. ARBITRATION

In the event of any dispute arising between the Parties in relation to or under this Agreement, the same shall be settled by Arbitration conducted in accordance with the Rules of Arbitration of ICA, New Delhi. The decision of the Arbitration Tribunal shall be final and binding. The venue for the Arbitration shall be New Delhi. The Arbitral Award shall be enforced in accordance with the provisions of the Arbitration & Conciliation Act 1996”.

21. Jurisdiction: - Courts in New Delhi shall have exclusive jurisdiction.

22. LIEN IN RESPECT OF CLAIM IN OTHER CONTRACTS

Any sum of money due and payable to the contractor (including the security deposit refundable to him) under the contract may be withheld or retained by way of lien by the STC in respect of payment of a sum of money arising out of or under the same or any other contract made by the contractor with the STC.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the STC will be kept withheld or retained as such by the STC or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

23.00 The Indemnity Clause

The Contractor shall at all times indemnify and keep STC and its Directors , officers etc. indemnified against any claims /liabilities/proceedings etc. from any third party in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its employees/workmen or agents or by any other third party resulting from or by any action, omission or operation conducted by or on behalf of the Contractor.

The Contractor shall at all times, indemnify and keep STC and its Directors , officers etc indemnified against any and all claims of the Employees, Workman, agent(s), sub-contractor if permitted by the Engineer in charge, employed engaged or otherwise working for the Contractor, in respect of wages, salaries, remuneration, compensation or the like.

All claims regarding indemnity shall survive the termination or expiry of the Contract and shall be recoverable from Performance Bank Guarantee (PBG) in addition to any other means.

24) WATER & POWER FOR INSTALLATION

STC shall provide power & water at one point for the proper execution of the work free of cost under normal circumstances. In case STC is not in a position to supply the water and/or power, the Contractor will make his own arrangement so that the work does not suffer. However, no claim of the contractor whatsoever shall be entertained by STC on this account.

25) COMPLIANCE OF LABOUR LAWS

The contractor shall abide by the Contract Labour, (Regulation and Abolition) Act, 1970, and Contract Labour (Abolition and Regulation) Central Rules 1971. The Contractor shall comply with the provisions of Payment of Wages Act, 1936. Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923. Industrial Disputes Act and other applicable regulations and other labour laws applicable to Contract Labour as mentioned below:

1. Industrial Disputes Act;
2. Industrial Establishment (Standing Orders) Act,
3. Trade Unions Act;
4. The Factory Act;
5. Employees Provident Fund & Miscellaneous Provision Act

6. Employees State Insurance Act;
7. Workmen's Compensation Act'
8. Payment of Gratuity Act;
9. Minimum Wages Act;
10. Payment of Wages Act;
11. Equal Remuneration Act,
12. Payment of Bonus Act,
13. National/Weekly Holidays Act,
14. Inter-state Migrant Workmen (Regulation of Employment and of service conditions) Act.
15. The contractor whose tender is accepted and who employs or employed 20 or more workers on any day of the preceding 12 months in various contracts, that he may have in other departments/establishments of STC shall obtain a valid License under the Contract Labour (R&A) Act 1970 and the Contract Labour (Regulation and Abolition) (Central) Rules 1971 before the commencement of the work and continue to have a valid license until the completion of the work.
Any failure to fulfill this requirement shall attract the penal provisions of the Act, which includes imprisonment for a term which may extent to three months or with fine or both.
16. No Labour below the age of 18 shall be employed on the work.
17. The contractor shall pay to the labour employed by him wages not less than the minimum wages in accordance with the notification for minimum wages issued by Govt. of NCT of Delhi (Labour Department) or Central Govt., whichever is higher from time to time
18. The contractor shall issue an employment Card to each worker within three days of the employment of the worker. This card shall be maintained up to date.

26) FORCE MAJEURE

For the purpose of this Contract, "Force Majeure" means an event which is beyond the reasonable control of STC or the Contractor, is not reasonably foreseeable, is unavoidable and is not brought about by or at the instance of the party claiming to be affected by such events and which caused the non-performance or delay in performance, and which makes a party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the

circumstances and includes, but is not open to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other extreme adverse weather conditions (i'e Act of God) , strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the party invoking Force Majeure to prevent), confiscation or any other action by Government agencies.

The party which is unable to fulfil its obligations under the present contract must within 24 hours from the day of occurrence of any of the causes mentioned in this clause shall inform the other party of the existence of the circumstances referred to above, which are responsible for causing delays in performance of the contract.

The party affected by an event of Force Majeure shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall take all reasonable measures to minimise the consequences of any event of Force Majeure.

The failure of either party to fulfil any of its obligations under this contract shall not be considered to be a breach of, or default under, the Contract insofar as such inability arises from an event of Force Majeure, provided that the party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objectives of carrying out the terms and conditions of the Contract.

Notwithstanding the above in case of Strike /Labour dispute that prolongs beyond a period of 48 hours, the Contractor is required to inform STC about the same, on account of which STC reserves the right to get the work done from any other agency at the risk and cost of the Contractor.

27. TERMINATION

Notwithstanding anything elsewhere provided herein and in addition to any other right or remedy of STC under the contract or otherwise, including right of STC for compensation for delay, the Engineer-in-charge may, without prejudice to his right against contractor in respect of any delay, bad workmanship or otherwise or to any claims for damage in respect of any breach of the contract and without prejudice to any rights or remedies under any of the provisions of this contract or

otherwise and whether the date for completion has or has not elapsed by intimation in writing, absolutely determine the contract.

Default or failure by the contractor in any of the under mentioned cases, including but not open to the following shall be the basis of taking action under this clause of the contract:

- 1) Failure to provide at the job site, sufficient labour, material, equipment, machinery, and/or facilities required for the proper and/or due execution of the work or any part thereof;
- 2) Failure to execute the works or any of them in accordance with the contract
- 3) Disobedience of any order or instruction of the Site Engineer and/or Engineer-in-charge.
- 4) Negligence in carrying out the work or carrying out of work found to be unsatisfactory by the Engineer-in-charge.
- 5) Abandonment of the works or any part thereof;
- 6) Failure to execute the contract in terms of the form of the Contract forming part of the Tender Documents within 10(ten days) of notice in this behalf from STC.
- 7) If the contractor is incapable of carrying out the work;
- 8) If the contractor misconduct in any manner;
- 9) If there is any change in the constitution of the contractor (if a contractor) or in the circumstances or organization of the contractor, which is detrimental to the interests of STC.
- 10) Dissolution of the contractor (if a contractor or commencement of liquidation) or winding up (whether voluntary or compulsory) of the contractor (if a company) or appointment of a receiver or Manager of any of the contractor's assets and/or insolvency of the contractor (if a sole proprietorship) or of any partner of the contractor (if a contractor);
- 11) Delay in execution of work, which in opinion of Engineer-in-charge shall delay the completion of work beyond the stipulated date of completion;
- 12) Distress, execution, or other legal process being levied on or upon any of the contractors goods and/or assets;
- 13) Death of Contactor (if an individual);

14) If the contractor or any person employed by him shall make or offer for any purpose connected with the contract any gift, gratuity, royalty, commission, gratification or other inducement (whether money or in any other form) to any employee or agent to STC.

15) If the contractor shall assign or attempt to assign his interest or any part thereof in the contract.

16) In case of violation of terms and conditions of the tender, violation of any stator regulations, local laws etc. STC shall reserve the right to terminate the contract.

The decision of the General Manager (Admn.), STC as to whether any of the events/contingencies mentioned in aforesaid clauses entitling STC to terminate the contract has occurred shall be final and binding upon the contractor and shall be non-obligation. The reason for the termination stated in the notice of termination shall be final and binding upon the contractor and shall be non-arbitral. The jobs left however by the contractor shall be got done at his risk and cost through the other agencies and the contract shall be determined accordingly.

17) If the Bidder deliberately gives wrong information in his tender, is liable to rejection at any stage. In such cases the deposited dues with STC shall be forfeited by the Corporation

28) CLEARANCE OF SITE

The contractor shall have to remove all melba and other unwanted material from site of work before handing over the installation to the STC. The work shall not be treated as complete in all respects unless these requirements are fulfilled by Contractor. In the event of contractor failing to do so, the STC shall have right to get the site cleared at Contractor's cost.

29.) WORKING SCHEDULE

Normally the work will be carried out during working hours however for early completion of the work , the contractor may request STC for allowing extra hours during day, night, Saturday or Sunday including holidays.

FINANCIAL TERMS AND OTHER TERMS

1.0 CONTRACT SUM

1.1 The Term Contract Sum” means: - This is item rate contract. The decision of L1 in this tender shall be taken on the basis of the grand total of the cost quoted.

1.2 Contractor shall strictly conform to the specifications, schedule of rates, general and special terms and conditions if any, and any other matter contained in the tender documents issued by the STC.

1.3 The value of estimated cost, Earnest Money and Performance Guarantee, Security Deposit are as follows:

- A) Earnest Money : Rs 1,00,000=00
- B) Performance Bank Guarantee : 5 % of awarded value as per
STC format
- C) Security Deposit : 5% of the awarded value

2.0 SECURITY DEPOSIT (S.D.)

2.01 The successful bidder will have to deposit a security amount @ 5% of the contract value through DD/ Bankers cheque, in favour of The State Trading Corporation of India Ltd., Payable at Delhi within 15 days from the letter of award or work order issued from STC. Amount of EMD already deposited shall not be adjusted in this Security deposit amount. EMD will be refunded on request.

2.02 Unless otherwise specifically required to be retained / forfeited by STC in part or full, the security deposit shall be refundable on the request of the contractor after satisfactorily completion of the free warranty period (Defect liability period) of 12 months to the satisfaction of the STC.

2.03 If the contractor fails and neglects to observe or perform any of this obligation of the contract it will be lawful for the STC to forfeit either in whole or in part, at its absolute discretion, the security deposit furnished by the contractor.

2.04 No interest shall be payable on such deposit.

2.05 SUBSIDY: subsidy / incentive as per Govt. of India of total cost of the project (as per MNRE norms) will be availed directly by the contractor. Availing of subsidy is sole responsibility of contractor; STC will not play any part/role in the

disbursement of the subsidy and STC shall be liable to pay the net price after subsidy which shall be consider as a contract value of project under this contract.

3.0 PERFORMANCE BANK GUARANTEE (PBG)

The bidder shall guarantee among other things, the following:-

- (a) Quality, Strength and performance of the material used.
- (b) Safe electrical and mechanical stress on all parts used under all specified condition of operation.
- (c) Satisfactory performance during the work execution period

The bidder shall submit an irrevocable performance guarantee amount which will be 5 % of awarded value in addition to security deposit against the proper performance of the equipment/ material. The performance guarantee amount will have to be deposited within 15 days of issue of detailed award letter in the form of Bank Guarantee. The performance bank guarantee amount will be valid up to the completion date of project plus 60 days beyond.

4.0 WORK OPEN TO INSPECTION

All work under or in course of execution or being executed in pursuance of the contract shall at all times be open to inspection and supervision of the Engineer-in-charge and his authorized subordinates, and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge or his subordinate to visit the works shall have been given to the contractor, either himself be present to receive order and instructions, or have a responsible agent duly accredited in writing, present for that purpose. Order given to the contractor's agent shall be considered to have the same force as if the same had been given to the contractor himself.

5) REJECTION OF DEFECTIVE MATERIAL

5.1 If on test, any portion of the "Supply , installation, testing commissioning (SITC) of pipes and associated auxiliaries after dismantling of existing Pipes and associated auxiliaries for Fire Hydrant System and deluge system in, or their accessories are found to be defective or not fulfilling the intent or the meaning of the specifications, the same shall be replaced with a new one OR be repaired or rectified either during or after the completion of the work but

before the expiry of defect liability period to the entire satisfaction of STC , **at no cost to STC.**

5.2 In case the contractor fail to remove the defects, within 7 days, STC reserves the right to take necessary remedial measures through other agencies and all expenses thus incurred would be recovered from the contractor.

6) APPROVAL OF MATERIALS

All materials articles and workmanship shall be subject to the approval of the Engineer-in-charge.

7) CONTRACTOR TO DEPLOY LABOUR AND MATERIAL

The contractor shall deploy at his own cost all labor and all consumable material tools and plants, appliances, implements, ladders, tackle, scaffolding etc. requisite for the proper execution of the work and whether included in the specifications or other documents forming part of the contract or referred to in the conditions or not, or which may be necessary for the purpose of entirely satisfying the engineer-in-charge.

The work is to be carried out as per the specifications in the tender and relevant standards. The material should be got approved before start of work.

All the equipment/material used shall be one of the stipulated makes in order of preference as per approved list of material.

Agency will be responsible to test & commission the entire installation .The work shall be executed without any loss/damage to the STC's properties.

8) CERTIFICATION OF COMPLETION

The work shall not be considered as completed until the Engineer-in-charge has certified in writing that the works have been completed and the guarantee period shall commence from the date of such certificate after handing over by STC. Partial completion will not be issued.

9). TIME AND EXTENSION FOR DELAY

If in the opinion of the Engineer-in-charge the works is delayed by:

- a) Force majeure
- b) Reasons of civil commotion, location combination of workers on strike or lock-out affecting any of the building trades;

- c) In consequence of the contractor for not having received in due time necessary instructions from the Engineer-in-charge for which he shall have specifically applied in writing.
- d) The Contractor shall immediately give notice thereof in writing to the Engineer-in-charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-charge to proceed with the works

Request for rescheduling of date of completion and extension of time, to be eligible for consideration, shall be made by the contractor in writing immediately after the happenings of the event causing delay. The contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- e) In such case, the Engineer-in-charge may give a fair and reasonable extension of time and reschedule the completion date. Such extension shall be communicated to the contractor by the Engineer-in-charge in writing within 10 days of receipt of such a request.
- (f) Time extension shall be sole prerogative of STC and no claim of contractor shall be entertained if time extension is not granted.

10). COMPENSATION FOR DELAY

If the contractor fails to maintain the required progress as mentioned in appendix or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the STC on account of such breach, pay as 1% per week up to maximum @ 10 % of the delayed part of work as compensation or penalty.

11.0 PAYMENT

- (a) No advance payments shall be made to the contractor. Payment shall be released on pro rata basis on monthly basis after supply, installation testing, commissioning of the equipment. Final payment shall be made only on the basis of detailed measurements on actual basis considering completion of the project. Payment to the contractor shall be made through NEFT mode only for which Bank charge necessary shall be borne by the contractor.

- (b) Final payment shall be released as per recommendation of Engineer in charge competent authority and deductions of statutory dues and as per the status of works carried out.

12. SUBMISSION OF BILL:-

A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer-in-charge for all the works executed in the previous months, and the Engineer-in-charge shall take or cause to be taken the requisite measurement for the purpose of having the same verified and the claim as far as admissible to be adjusted.

13) MEASUREMENTS

Measurements shall be in metric system and running account bills as per schedule of rates shall be prepared and submitted for the work done based on joint measurements

14.0 RATES

14.01 The tender rates shall include the cost of materials, labor, installation, testing, commissioning, loading, unloading, shifting, supervision, tools & tackles, transport, all taxes, excise duty and other levy, contingencies, breakage, wastage, sundries, scaffolding etc. and maintenance during defect liability period for one year for complete installations of Supply, Installation, Testing & Commissioning Of Grid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Delhi Whether specifically mentioned or not. **The service tax shall be paid extra as per rules.**

14.02 If the rates of any item(s) is/are left blank by the bidder, the same shall be treated as zero and it will be presumed the bidder has already accounted the rates in other items against the blank items and the contractor shall have to carry out the that item work within stipulated cost.

14.03 TAXES & DUTIES

The contractor shall also include in his price all taxes, duties or other levies (viz. excise duty, custom duty, VAT, works contract tax, octroi, insurance etc.) which are legally levy-able works. The services tax shall be payable extra by STC as per extant rules. The prices are fixed during the currency of contract.

However, in case of any variation in Tax or levy is imposed by statutes, after the last date of submission of tender, the contractor thereupon shall have to

pay necessarily pays such revised taxes levies The same shall not be reimbursed by STC except service tax. However variation in service tax shall be paid as per extant rules by STC.

15.0 DEVIATION/VARIATION/EXTENT/EXTRA ITEMS/SUBSTITUTED ITEMS AND PRICING:

15.01 GENERAL

The Engineer-in-charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons provided the same are recorded in writing and proper approval is obtained thereof and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same condition in all respects including price on which he agreed to do the main work. The contractor will be bounded to accept the rates finalized by STC for extra items. The firm has to intimate the rates prior to supplying to STC.

The cost of total extra items shall not be allowed beyond 5% of the total contract value.

15.02 DEVIATION IN QUANTITY

STC reserve the right to order the contractor to change the quantities in a range of contract value **25% of total contract value (Plus or Minus)**, on the same rates, terms and conditions. The contractor will have no claim whatsoever for this change .The contractor will be bounded to accept the STC order. The order for enhancing the quantity will be placed latest within 1 month from the date of completion of the project.

16) DRAWINGS, MAINTENANCE MANUALS ETC.

On the award of work, the contractor shall immediately proceed with the preparation of General Arrangement drawings, single line diagrams, schematic

for the project, detailing the equipment that are to be installed and the ancillary works that are to be carried out. Four sets of all such working drawings shall be submitted to the Engineer in charge, for his approval to ensure that the works will be carried out in accordance with the specifications and drawings, including such changes as may have been mutually agreed upon. All the drawings shall be received by the STC for its approval, within 10 days of the award of work. The approval of the drawings by the STC representative shall in no way relieve the contractor from his obligations to provide a complete and satisfactory Supply, Installation, Testing & Commissioning Of Grid Connected Roof Top Solar PV System as per intent and purposes as laid down in the specifications, any omissions and/or errors shall be made good or rectified whether or not the drawings are approved prior to the completion of the work the contractor shall furnish to STC, Four sets of a comprehensive manual, describing all components, furnishing list of installation for the operation and maintenance of the (SITC) of complete system.

Successful contractor after receipt of order must furnish detailed bar chart showing various activities with respect to time and he must organize co-ordination meeting at site to review the progress of his work.

17) AS BUILT DRAWINGS

On completion of the work in all respects, the contractor shall supply 4 sets of as built drawings indicating the completed work with detailed specifications used for various equipment as to the satisfaction and verification of the Engineer in charge. Final bill will not be paid for non-submission of the same.

18) TEST & INSPECTION

a) Before the dispatch of the material to STC, the contractor shall inform STC that the material is ready for inspection. The contractor shall arrange the inspection at the venue as indicated. After the detailed checking/ testing in appropriate laboratory of the material and consequent approval of the testing Engineer as per the standard test procedures laid down in the IS / relevant standards thereafter as per instructions of STC Engineer. The inspecting officer shall inspect the material as per the technical specification of the tender document. Partial inspection of the material will not be entertained. Once the material is inspected and cleared for dispatch by inspecting engineer, the contractor shall

arrange to deliver the same material at site in intact condition. The poor quality of material shall be rejected. However such tests at any laboratory during any stage of contract period does not absolve the responsibility of the contractor for proper functioning of the material during execution and afterwards also.

- b)** All the cost including travelling, lodging, boarding of inspecting engineer will be borne by the contractor. The entire test either on the field or outside concerning the execution of the work and supply of materials by the contractor shall be carried out by the contractor at his own cost.
- c)** The work is subject to inspection at all times by the STC and or its authorized representative. The contractor shall carry out all instructions given during inspection and shall ensure that the work is being carried out according to the technical specifications of this tender. The technical documents will be furnished to him during the performance of the work and the relevant codes of practice.
- d)** The contractor shall provide for purpose of inspection access to all tools and gazettes required for inspection.
- e)** All results of inspection and tests will be recorded in the inspection reports. Performa of which will be approved by the STC. These reports shall form part of the completion documents.
- f)** Any work not conforming to the execution of drawings, specifications or codes shall be rejected forthwith and the contractor shall carry out the rectification at his own cost.
- g)** STC reserve the right to waive off such inspections and may accept the test reports also if available from genuine laboratory / established labs for the tests which are not feasible to carry out.

19) GUARANTEE

The contractor shall guarantee that all the equipment, materials and components supplied, fabricated, designed and installed by him shall be free from defects due to faulty design, material or workmanship. The period of the guarantee shall be five years from the date of handing over the complete work.

During this period any or all components /equipment pertaining found to be defective shall be replaced with a new one, at no extra cost. The contractor shall provide the necessary personnel and tools for fulfilling the above guarantee.

If the above is not carried out within a reasonable time, then STC may arrange to do the same at the contractor's risk and cost, without prejudice to any other rights.

20) PAINTING

All equipment/ancillary items, supports, clamps, saddles etc. will be painted in approved manner, using colors scheme as approved by the STC.

21) SAFE CUSTODY AND STORAGE

Safe custody of all machinery and equipment supplied by the contractor shall be his own responsibility till the final taking over by the employer. The contractor should, therefore, employ sufficient staff for watch and ward at his own expenses. STC may, however, allow the contractor to use the temporary storage, of his equipment if such spaces are ready and available.

22) INTERPRETATION

In interpretation of specifications, the following orders of decreasing importance shall be followed:

- 13.1.1.1 Schedule of quantities
- 13.1.1.2 Technical specifications
- 13.1.1.3 Schedule of Fiscal aspects
- 13.1.1.4 Special conditions and scope of works
- 13.1.1.5 General conditions of contract

Matters are covered by the specifications given in this contract, as a whole shall be covered by relevant and latest Indian Standard codes/CPWD code in case of any disputes. If such codes on a particular subject have not been framed or crossed with the specifications of this tender, the decision of the STC shall be final and binding.

23) Comprehensive Operation & Maintenance during Defects Liability Period

A) COMPLAINTS

The contractor shall receive calls for any and all problems experienced in the operation of the system installed under this contract, attend to these within 4-5

hours of receiving the complaints and shall take steps to immediately correct any deficiencies that may exist.

B) REPAIRS/REPLACEMENT

In case any defect is observed pertaining to cameras or other equipment /component, the same shall necessarily be required to be replaced with a new one whereas in cases of any other defect, immediate service, repairs and maintenance shall be carried out within the defect liability period. The period for replacement of defective part is 1 days else STC may take the works through any other agency at the risk and cost of the contractor. The replacement parts and labor shall be supplied promptly free of charge to STC.

C) Un-Attending Defects

If the contractor does not repair the defect as indicated in clause B within the stipulated time asked by the Engineer in charge, STC shall be free to get the repairs done at the risk and cost of the Contractor, through the dues pending with STC or any other means possible.

D) Operation: - The system shall be operated by contractor during the defect liability period.

24) SCAFFOLDINGS

The contractor shall allow the usage of the scaffoldings etc. for the inspections and also to the other agencies employed by the STC for execution of other works in a proper manner. No charge shall be made by the contractor to other agencies for the same.

25) The tendered rates shall be inclusive of all necessary items required to complete the work whether mentioned or not.

26) The equipment and materials to be supplied shall conform minimum to the technical details of the material attached with the tender.

27) Certificate of inspection – the Contractor shall obtain and deliver to the STC, all the certificates of inspection and approval by the local statutory authorities concerned (if required), at site before putting the system into operation. The inspection fee shall be paid by the contractor. License fee will be paid by STC.

28) DEFECT LIABILITY PERIOD

The contractor shall guarantee the installation for a period of five years against defective materials and workmanship from the date of taking over by the STC and shall rectify or replace the defective material or workmanship without any extra cost to the STC as provided under the terms of the contract /Tender document without any delay. If the contractor fails to attend the defects within the period as asked by STC, then the STC has right to get it done at the risk and cost of contractor without giving any further notice. Effective date of completion of work shall be considered after handing over of the entire installation of STC even if, the equipment are installed and put into use in phases, accordingly the defect liability period shall start only from the date of completion and taking over of the entire installation by STC.

29) All Internal & External Electrical/Mechanical/Civil works etc.,

For proper installation of all the equipment is under contractor's scope and it should be executed as per CPWD specifications stipulated and/or general specifications for works of and to the entire satisfaction of the Engineer-in-charge by the contractor without any extra cost to STC.

Special conditions and scope of work

1. The scope of work for the bidder include Identification of buildings/leasing rooftop of buildings for 25 years, Obtaining No Objection Certificate (NOC)” from Distribution Company (DISCOM) for grid connectivity, complete design, engineering, manufacture, supply, storage, civil work, erection, testing & commissioning of the grid connected rooftop solar PV project including operation and maintenance (O&M) of the project for a period of Five years after commissioning.

2. PROJECT COST /LEVELLIZED TARIFF

The Project cost/Levellized tariff shall include all the costs related to above Scope of Work. Bidder shall quote for the entire facilities on a “single responsibility” basis such that the total Bid Price covers all the obligations mentioned in the Bidding Documents in respect of Design, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for a period of 5 years, goods and services including spares required if any during O&M period. The Bidder has to take all permits, approvals and licenses, Insurance etc., provide training and such other items and services required to complete the scope of work mentioned above.

The project cost/levellized tariff quoted is on lump sum turnkey basis and the bidder is responsible for the total Scope of Work described

The project cost/levellized tariff shall remain firm and fixed and shall be binding on the Successful Bidder till completion of work for payment of subsidy amount irrespective of his actual cost of execution of the project. No escalation will be granted on any reason whatsoever. The bidder shall not be entitled to claim any additional charges, even though it may be necessary to extend the completion period for any reasons whatsoever.

The project cost/levellized tariff shall be inclusive of all duties and taxes, insurance etc .The prices quoted by the firm shall be complete in all respect and no price variation /adjustment shall be payable

The operation & maintenance of Solar Photovoltaic Power Plant would include wear, tear, overhauling, machine breakdown, insurance, and replacement of defective modules, invertors / Power Conditioning Unit

(PCU), spares, consumables & other parts for a period of 5 years

The project cost/levellized tariff shall be specified in sanction letter based on Successful Bidder's quote for each state. The project cost shall be in accordance with all terms, conditions, specifications and other conditions of the Contract as accepted by the STC and incorporated into the sanction letter.

3 WARRANTEES AND GUARANTEES

3.1 The Bidder shall warrant that the goods supplied under this contract are new, unused, of the most recent or latest technology and incorporate all recent improvements in design and materials. The bidder shall provide system warrantee covering the rectification of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of 5 years from the date of commissioning. The successful bidder has to transfer all the Guarantees /Warrantees of the different components to the Owner of the project. The responsibility of operation of Warrantee and Guarantee clauses and Claims/ Settlement of issues arising out of said clauses shall be joint responsibility of the Successful bidder and the owner of the project and STC will not be responsible in any way for any claims whatsoever on account of the above.

4.0 TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP

4.1 The Design, engineering, manufacture, supply, installation, testing and performance of the equipment shall be in accordance with latest appropriate IEC/Indian Standards as detailed in the Technical specifications of the bid document. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE shall be used.

4.2 The specifications of the components should meet the technical specifications mentioned .

4.3 Any supplies which have not been specifically mentioned in this Contract but which are necessary for the design, engineering, manufacture, supply & performance or completeness of the project shall be provided by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV plant.

5. OPERATION & MAINTENANCE (O&M)

5.1 The bidder shall be responsible for Operation and Maintenance of the Roof top Solar PV system of capacity above 10kWp for a period of 5 years, during which STC will monitor the project for effective performance in line with conditions specified elsewhere in the bid document. During this period, the bidder shall be responsible for supply of all spare parts as required from time to time for scheduled and preventive maintenance, major overhauling of the plant, replacement of defective modules, inverters, PCU's etc and maintaining log sheets for operation detail, deployment of staff for continuous operations and qualified engineer for supervision of O&M work, complaint logging & its attending.

6.0 METERING AND GRID CONNECTIVITY

Metering and grid connectivity of the roof top solar PV system under this scheme would be the responsibility of the Bidder in accordance with the prevailing guidelines of the concerned DISCOM and / or CEA (if available by the time of implementation). STC could facilitate connectivity; however the entire responsibility lies with bidder only.

7.0 PLANT PERFORMANCE EVALUATION

The successful bidder shall be required to meet minimum guaranteed generation with Performance Ratio (PR) at the time of commissioning and related Capacity Utilization Factor (CUF) as per the GHI levels of the location during the O&M period. PR should be shown minimum of 75% at the time of inspection for initial commissioning acceptance to qualify for release of 10% subsidy and as per tender document.. Minimum CUF of 15% should be maintained for a period of 5years. The bidder should send the periodic plant output details to STC for ensuring the CUF. The PR will be measured at Inverter output level during peak radiation conditions.

8.0 PROGRESS REPORT

The bidder shall submit the progress report monthly to STC in Prescribed Proforma. STC will have the right to depute his/their representatives to ascertain the progress of contract at the premises of works of the bidder.

9.0 PROJECT INSPECTION.

The project progress will be monitored by STC and the projects will be inspected for quality at any time during commissioning or after the

completion of the project either by officer(s) from STC or any authorized agency/ experts.

9.1 STC reserves the right to do sample inspection checks for the projects commissioned by the Bidder.

9.2 STC may also depute a technical person(s) from its list of empanelled experts for inspection, Third party verification, monitoring of system installed to oversee, the implementation as per required standards and also to visit the manufactures facilities to check the quality of products as well as to visit the system integrators to assess their technical capabilities as and when required.

10.0 APPLICABLE LAW

The Contract shall be interpreted in accordance with the laws of the Union of India.

11.0 DISPUTE - IN CASE THE CONTRACTOR IS A PUBLIC SECTOR ENTERPRISE OR A GOVERNMENT DEPARTMENT.

In case the Contractor is a Public Sector Enterprise or a Government Department, the dispute shall be referred for resolution in Permanent Machinery for Arbitration (PMA) of the Department of Public Enterprise, Government of India. Such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary / Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusive. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

12.0 OTHER CONDITIONS

12.1 The Successful bidder shall not transfer, assign or sublet the work under

this contract or any substantial part thereof to any other party without the prior consent of STC in writing.

12. 2 The Successful bidder shall not display the photographs of the work and not take advantage through publicity of the work without written permission of STC and owner of the Rooftop.

12.3 The Successful bidder shall not make any other use of any of the documents or information of this contract, except for the purposes of performing the contract.

13.0 SUCCESSORS AND ASSIGNS:

In case the STC or Successful bidder may undergo any merger or amalgamation or a scheme of arrangement or similar re-organization & this contract is assigned to any entity (ies) partly or wholly, the contract shall be binding mutatis mutandis upon the successor entities & shall continue to remain valid with respect to obligation of the successor entities.

14.0 SEVERABILITY:

It is stated that each paragraph, clause, sub-clause, schedule or annexure of this contract shall be deemed severable & in the event of the unenforceability of any paragraph, clause sub-clause, schedule or the remaining part of the paragraph, clause, sub-clause, schedule annexure & rest of the contract shall continue to be in full force & effect.

15.0 COUNTERPARTS:

This contract may be executed in one or more counterparts, each of which shall be deemed an original & all of which collectively shall be deemed one of the same instrument.

16.0 RIGHTS & REMEDIES UNDER THE CONTRACT ONLY FOR THE PARTIES:

This contract is not intended & shall not be construed to confer on any person other than the STC & Successful bidder hereto, any rights and / or remedies herein.

17.0 PRICE PREFERENCE FOR M.S.M.E

All benefits are available to MSMEs subject to compliance of provision of MSMED Act,2006 and its amendment thereof.

SCHEDULE OF FISCAL ASPECT

1	Earnest money (E.M.D.) to be deposited	Rs. 1,00,000=00
2)	Time of completion	3 months from the date of issue of Letter of award
3)	Date of commencement	From the date of issue of award Letter
4)	Compensation for delay (Liquidated damages)	1% per week for the delayed section, subject to max. of 10% of contract value
5)	Security Deposit	5 % of the value of work awarded within 15 days from Letter of award
6)	Performance Bank Guarantee	5% value of awarded value within 15 days from date of Letter of award
7)	Release of Security deposit	After satisfactory expiry of Defect Liability Period of 12 months
8)	Defect Liability Period	12 months from the date of completion and handing over.
9)	Terms of payment	The payment shall be made on pro rata on monthly basis basis after Supply, Installation, Testing & Commissioning of 60 KWp Grid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan

Technical specifications

The proposed projects shall be commissioned as per the technical Specifications given below. Any shortcomings will lead to cancellation of subsidy in full or part as decided by STC & Competent Authority's decision will be final and binding on the bidder.

1. DEFINITION

A Grid Tied Solar Rooftop Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables and switches. PV Array is mounted on a suitable structure. Grid tied SPV system is without battery and should be designed with necessary features to supplement the grid power during day time. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

Solar PV system shall consist of following equipment/components.

- I. Solar PV modules consisting of required number of **Crystalline** PV modules.
- II. Grid interactive Power Conditioning Unit with Remote Monitoring System
- III. Mounting structures
- IV. Junction Boxes.
- V. Earthing and lightening protections.
- VI. IR/UV protected PVC Cables, pipes and accessories

2. SOLAR PHOTOVOLTAIC MODULES:

2.1 The PV modules used should be made in India.

2.2. The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-2- requirements for construction & Part 2 - Requirements for testing, for safety qualification or equivalent IS.

a) For the PV modules to be used in a highly corrosive atmosphere throughout their

lifetime, they must qualify to IEC 61701/IS 61701

- b) The total solar PV array capacity should not be less than allocated capacity (kWp) and should comprise of solar crystalline modules of minimum 250 Wp and above wattage. Module capacity less than minimum 250 watts should not be accepted
- c) Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- d) PV modules must be tested and approved by one of the IEC authorized test centers.
- e) The module frame shall be made of corrosion resistant materials, preferably having anodized aluminum.
- f) The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid. STC shall allow only minor changes at the time of execution.
- g) Other general requirement for the PV modules and subsystems shall be the Following:
 - I. The rated output power of any supplied module shall have tolerance of +/- 3%.
 - II. The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) per cent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
 - III. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
 - IV. IV curves at STC should be provided by bidder.
- 3. Modules deployed must use a RF identification tag. The following information must be mentioned in the RFID used on each modules (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).
 - a) Name of the manufacturer of the PV module
 - b) Name of the manufacturer of Solar Cells.

- c) Month & year of the manufacture (separate for solar cells and modules)
- d) Country of origin (separately for solar cells and module)
- e) I-V curve for the module Wattage, I_m , V_m and FF for the module
- f) Unique Serial No and Model No of the module
- g) Date and year of obtaining IEC PV module qualification certificate.
- h) Name of the test lab issuing IEC certificate.
- i) Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001

4.Warranties:

a) Material Warranty:

i. Material Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (05) years from the date of sale to the original customer ("Customer")

ii. Defects and/or failures due to manufacturing

iii. Defects and/or failures due to quality of materials

iv. Non conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owners sole option

b) Performance Warranty:

i. The predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 25 year period and not more than 10% after ten years period of the full rated original output.

5. ARRAY STRUCTURE

a) Hot dip galvanized MS mounting structures may be used for mounting the modules/ panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum insolation. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements.

b) The Mounting structure shall be so designed to withstand the speed for the

wind zone of the location where a PV system is proposed to be installed (like Delhi-wind speed of 150 km/ hour). It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard and submit wind loading calculation sheet to STC]. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.

c) The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.

d) Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts. Aluminium structures also can be used which can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided either by coating or anodization.

e) The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels

f) Regarding civil structures the bidder need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof.

g) The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m^2 .

h) The minimum clearance of the structure from the roof level should be 300 mm.

6. JUNCTION BOXES (JBs)

a) The junction boxes are to be provided in the PV array for termination of connecting cables. The J. Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminium /cast aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.

b) Copper bus bars/terminal blocks housed in the junction box with suitable

termination threads Conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single / double compression cable glands. Provision of earthings. It should be placed at 5 feet height or above for ease of accessibility.

c) Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs) / SPDs, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups.

d) Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification

7. DC DISTRIBUTION BOARD:

a) DC Distribution panel to receive the DC output from the array field.

b) DC DPBs shall have sheet from enclosure of dust & vermin proof conform to IP 65 protection. The bus bars are made of copper of desired size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.

8. AC DISTRIBUTION PANEL BOARD:

a) AC Distribution Panel Board (DPB) shall control the AC power from PCU/ inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.

b) All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.

c) The changeover switches, cabling work should be undertaken by the bidder as part of the project.

d) All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air - insulated, cubical type suitable for operation on three phase / single phase, 415 or 230 volts, 50 Hz

e) The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.

f) All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.

g) Should conform to Indian Electricity Act and rules (till last amendment).

h) All the 415 AC or 230 volts devices / equipment like bus support insulators, circuit breakers, SPDs, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions

Variation in supply voltage	+/- 10 %
Variation in supply frequency	+/- 3 Hz

9. **PCU/ARRAY SIZE RATIO:**

- a) The combined wattage of all inverters should not be less than rated capacity of power plant under STC.
- b) Maximum power point tracker shall be integrated in the PCU/inverter to maximize energy drawn from the array.

10. **PCU/ Inverter:**

As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the “Power Conditioning Unit (PCU)”. In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit/inverter should also be DG set interactive. If necessary. Inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:

Switching devices	: IGBT/MOSFET
Control	: Microprocessor /DSP
Nominal AC output voltage	: 415V, 3 Phase, 50 Hz
Output frequency	50 Hz
Grid Frequency Synchronization	+ 3 Hz or more
Ambient temperature considered	: -20o C to 50o C
Humidity	95 % Non-condensing
Protection of Enclosure	IP-20(Minimum)for indoor. IP-65(Minimum) for outdoor

Grid Frequency Tolerance range	+ 3 or more
Grid Voltage tolerance	- 20% & + 15 %
No-load losses	Less than 1% of rated power
Inverter efficiency(minimum)	>93% (In case of 10kW or above)
Inverter efficiency (minimum)	: > 90% (In case of less than 10 kW)
THD	< 3%
PF	> 0.9

(In case single phase inverters are offered, suitable arrangement for Balancing the phases must be made.)

- a) Three phase PCU/ inverter shall be used with each power plant system (10kW and/or above) but In case of less than 10kW single phase inverter can be used.
- b) PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- c) The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
- d) Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- e) The power conditioning units / inverters should comply with applicable IEC/ equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068-2(1,2,14,30) /Equivalent BIS Std.
- f) The charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS std. The junction boxes/ enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.
- g) The PCU/ inverters should be tested from the MNRE approved test centres /

NABL /BIS /IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

11. INTEGRATION OF PV POWER WITH GRID:

The output power from SPV would be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV grid. Once the DG set comes into service PV system shall again be synchronized with DG supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid/ DG power connection need to be provided.

12. DATA ACQUISITION SYSTEM / PLANT MONITORING

- i. Data Acquisition System shall be provided for each of the solar PV plant.
- ii. Data Logging Provision for plant control and monitoring, time and date stamped system data logs for analysis with the high quality, suitable PC. Metering and Instrumentation for display of systems parameters and status indication to be provided.
- iii. Solar Irradiance: An integrating Pyranometer / Solar cell based irradiation sensor (along with calibration certificate) provided, with the sensor mounted in the plane of the array. Readout integrated with data logging system.
- iv. Temperature: Temperature probes for recording the Solar panel temperature and/or ambient temperature to be provided complete with readouts integrated with the data logging system
- v. The following parameters are accessible via the operating interface display in real time separately for solar power plant:
 - a. AC Voltage.
 - b.AC Output current.
 - c. Output Power
 - d. Power factor.
 - e. DC Input Voltage.
 - f. DC Input Current.
 - g. Time Active.
 - h. Time disabled.

- i. Time Idle.
- j. Power produced
- k. Protective function limits (Viz-AC Over voltage, AC Under voltage, Over frequency, Under frequency ground fault, PV starting voltage, PV stopping voltage.
- vi. All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values, previous values for up to a month and the average values) should be made available for energy auditing through the internal microprocessor and should be read on the digital front panel.
- vii. PV array energy production: Digital Energy Meters to log the actual value of AC/ DC voltage, Current & Energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.5 accuracy class. provided as part of the inverter and/or string/array combiner box or separately.
- ix. String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.
- x. Computerized AC energy monitoring shall be in addition to the digital AC energy meter.
- xi. The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular and graphical form.
- xii. All instantaneous data shall be shown on the computer screen.
- xiii. Software shall be provided for USB download and analysis of DC and AC parametric data for individual plant.
- xiv. Provision for Internet monitoring and download of data shall be also incorporated.
- xv. Remote Server and Software for centralized Internet monitoring system shall be also provided for download and analysis of cumulative data of all the plants and the data of the solar radiation and temperature monitoring system.

xvi. Ambient / Solar PV module back surface temperature shall be also monitored on continuous basis.

xvii. Simultaneous monitoring of DC and AC electrical voltage, current, power, energy and other data of the plant for correlation with solar and environment data shall be provided.

xviii. Remote Monitoring and data acquisition through Remote Monitoring System software at the owner /[NAME OF THE ORGANISATION] location with latest software/hardware configuration and service connectivity for online / real time data monitoring/control complete to be supplied and operation and maintenance/control to be ensured by the supplier. Provision for interfacing these data on [NAME OF THE ORGANISATION] server and portal in future shall be kept.

13. TRANSFORMER “IF REQUIRED” & METERING:

a) Dry/oil type relevant kVA, 11kV/415V, 50 Hz Step up along with all protections, switchgears, Vacuum circuit breakers, cables etc. along with required civil work.

b) The bidirectional electronic energy meter (0.5 S class) shall be installed for the measurement of import/Export of energy.

c) The bidder must take approval/NOC from the Concerned DISCOM for the connectivity, technical feasibility, and synchronization of SPV plant before commissioning of SPV plant.

d) Reverse power relay shall be provided by bidder (if necessary), as per the local DISCOM requirement.

14. POWER CONSUMPTION:

a) Regarding the generated power consumption, priority need to give for internal consumption first and thereafter any excess power can be exported to grid. Finalization of tariff is not under the purview of STC or MNRE. Decisions of appropriate authority like DISCOM, state regulator may be followed.

15. PROTECTIONS

The system should be provided with all necessary protections like earthing, Lightning, and grid islanding as follows:

15.1. LIGHTNING PROTECTION

The SPV power plants shall be provided with lightning & overvoltage protection.

The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC

62305 standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and suitable earthing such that induced transients find an alternate route to earth.

15.2. SURGE PROTECTION

Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and -ve terminals to earth (via Y arrangement)

15.3. EARTHING PROTECTION

i. Each array structure of the PV yard should be grounded/ earthed properly as per IS:3043-1987. In addition the lightning arrester/masts should also be earthed inside the array field. Earth Resistance shall be tested in presence of the representative of Department/[NAME OF THE ORGANISATION] as and when required after earthing by calibrated earth tester. PCU, ACDB and DCDB should also be earthed properly.

ii. Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential.

15.4. GRID ISLANDING:

Independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as “islands.” Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.

ii. A manual disconnect 4pole isolation switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by

the utility personnel

16. CABLES

Cables of appropriate size to be used in the system shall have the following characteristics:

i. Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards ii.

Temp. Range: -10°C to $+80^{\circ}\text{C}$.

iii. Voltage rating 660/1000V

iv. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation

v. Flexible

vi. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.

vii. Cable Routing/ Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.

viii. The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25years.

ix. The ratings given are approximate. Bidder to indicate size and length as per system design requirement. All the cables required for the plant provided by the bidder. Any change in cabling sizes if desired by the bidder/approved after citing appropriate reasons. All cable schedules/layout drawings approved prior to installation.

x. Multi Strand, Annealed high conductivity copper conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armoured cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BoS item / component Standard

Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V ,UV resistant for outdoor installation IS /IEC 69947.

xi. The size of each type of DC cable selected shall be based on minimum voltage

drop however; the maximum drop shall be limited to 1%.

xii. The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.

17. CONNECTIVITY

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the Distribution Code/Supply Code of the State and amended from time to time. Following criteria have been suggested for selection of voltage level in the distribution system for ready reference of the solar suppliers.

Plant Capacity	Connecting voltage
Above 10kW and up to 100 kW	415V - three phase, 50 Hz,

18. TOOLS & TACKLES AND SPARES:

i. After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the bidder for maintenance purpose. List of tools and tackles to be supplied by the bidder for approval of specifications and make from STC .

ii. A list of requisite spares in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes. Fuses, MOVs / arrestors, MCCBs etc along with spare set of PV modules be indicated, which shall be supplied along with the equipment. A minimum set of spares shall be maintained in the plant itself for the entire period of warranty and Operation & Maintenance which upon its use shall be replenished

19. DANGER BOARDS AND SIGNAGES:

Danger boards should be provided as and where necessary as per IE Act. /IE rules as amended up to date. Three signage shall be provided one each at battery - cum- control room, solar array area and main entry from administrative block. Text of the signage may be finalized in consultation with STC.

20. FIRE EXTINGUISHERS:

The firefighting system for the proposed power plant for fire protection shall be consisting of:

- a) Portable fire extinguishers in the control room for fire caused by electrical short circuits
- b) Sand buckets in the control room
- c) The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCUs as well as on the Roof or site where the PV arrays have been installed.

21. DRAWINGS & MANUALS:

- i. Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. Bidders shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the power plant and power evacuation, synchronization along with protection equipment.
- ii. Approved ISI and reputed makes for equipment be used.
- iii. For complete electro-mechanical works, bidders shall supply complete design, details and drawings for approval to STC before progressing with the installation work

22. PLANNING AND DESIGNING:

- i. The bidder should carry out Shadow Analysis at the site and accordingly design strings & arrays layout considering optimal usage of space, material and labor. The bidder should submit the array layout drawings along with shadow Analysis Report to STC for approval.
- ii. STC reserves the right to modify the landscaping design, Layout and specification of sub-systems and components at any stage as per local site conditions/requirements.
- iii. The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidder submits three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

23. Drawings to be furnished by bidder after award of contract

- i. The Contractor shall furnish the following drawings Award/Intent and obtain approval
- ii. General arrangement and dimensioned layout
- iii. Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
- iv. Structural drawing along with foundation details for the structure.
- v. Itemized bill of material for complete SV plant covering all the components and associated accessories.
- vi. Layout of solar Power Array
- vii. Shadow analysis of the roof

24. SAFETY MEASURES:

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

GENERAL TECHNICAL PARTICULAR (GTP)

Sr. No.	ITEMS	applicable bis/equivalent iec standard or mnre specification		
		Standard specification	standard number	bidder compliance yes/no
1	SPV MODULES	as per tender specification	iec61215/is14286;iec61730 part-1&part2;iec 61701/is 61701	
2	array structure	As per tender specification.	IS 2062:1992 and IS4759 can design to withstand wind of 150Km/hr	
3	panels/junction box	ip 65/ as per tender specification	iec62208 AS PER IEC529	

4	distribution boards ;switch gears/circuit breaker/CONNECTORS	ip 65 / as per tender specification	IEC 60947 PART1,2,3/IS 60947 PART 1,2,3,EN 50521	
6	pCU(power conditioning unit) with mppt(maximum power point tracker)	IGBT/mosfet /ip 65(for outdoor)/ip 20(for Indoor)/	IEC 61683/IS61683 AND IEC600682(1,2,14,30)/EQUIVALENT SPECIFICATION; ENVIROMENTAL TESTING AND EFFICIENCY MEASUREMENT.	
7	METERS	As per tender specification.	As per CEA guidelines issued from time to time.	
8	transformer	As per tender specification.	Approval/NOC from concern DISCOM	
9	cables	As per tender specification.	IEC 60227/IS 694 and IEC 60502/IS1554 (Pt. I&II)	
10	protection/earthing	As per tender specification or as per standard IS	IS 3043-1987 IEC62305	

THE STATE TRADING CORPORATION OF INDIA LIMITED
JAWAHAR VYAPAR BHAWAN, TOLSTOY MARG, NEW DELHI

Price Bid

Supply, Installation, Testing & Commissioning of 60 KWp Grid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Connaught Place Delhi

(a) Supply, Installation, Testing & Commissioning of 60 KWp

S.No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
1.	Design, Engineering, Manufacturing, Storage, Civil Work, Supply, Installation, testing and commissioning of 60 kWp Solar photovoltaic power plant (Grid Connected) comprising of SPV(solar photovoltaic) module ,PCU,DB, Energy meter, cables etc. all accessories needed for complete the work in all respect ;with 1years defect liability period at, Jawahar Vyapar Bhawan ,1-Tolstoy Marg , New Delhi	Kw	60		
30.	Total				
In words Rs.					

(b) 5 Years comprehensive operation & maintenance of 60 KWp Plant after successful completion of defect liability period of one year

Sr. No.	Description	Unit	Qty.	Unit cost per year	Amount (Rs.)
1.	5 Years comprehensive operation & maintenance of 60 KWp Plant after successful completion of defect liability period of one year, including all material and services.	Years	05		
Total (Rs.)					
Words					
.....					

(c) Total (a) +(b) = Rs

In words Rs

Signature, Name and seal of the bidder

- 1.The price comparison shall be done on the basis of (C) i:e Total Cost of the work (a)+(b)
2. Service Tax shall be paid extra by STC as per extant rules. All taxes will be inclusive except service tax.
3. No other format of price submission shall be accepted. Bidder should sign on every page of the bid
- 4.The bidder is required to quote for the complete work, though STC reserve the right to award the work in full of in part.
5. Bidder quoting for only one part of the above shall not be considered.

6. The offer shall be valid for 90 days from the date of tender opening.
7. Leaving an unfilled entry in the price bid against any term shall mean as Zero cost and the bid shall be evaluated accordingly.
8. Cost of dismantled material shall be treated as “Sale of scrap” by STC. Tax liability shall be borne by the contractor accordingly.
9. If there is variation in statutory tax liability during contract period, the same shall be borne by the contractor except for service tax.

The State Trading Corporation of India Ltd.

(Data to be filled by the bidder)

Name of the Contract / Work: - Supply, Installation, Testing & Commissioning of 60 KWp Grid Connected Roof Top Solar PV System in Jawahar Vyapar Bhawan, 1-Tolstoy Marg, Connaught Place Delhi

Sr. No.	Particulars			
1.	Name and Address of the Firm			
2.	Details of Similar Past work experience			
3.	Annual turnover , net worth and Profit of last threes 03 (FY) years (Rs.)			
		Annual turnover	Net worth	Profit
	2015-16			
	2014-15			
	2013-14			
4	Average Annual turnover of last threes 03 FY as above years (Rs.)			
5.	Service tax No			
6.	P.F No.			
7.	PAN No.			
8.	TIN No.			
9.	Satisfactory performance certificates for the mentioned			

	works	
10.	Non- Black-listing certificate, Affidavits enclosed	
11.	Registration No. for MSME/NSE for availing the benefit of preferential purchase policy	
12.	Details of tender document fee (Rs. 5000.00 (including VAT)	
13.	Details of EMD (Rs. 1.00 Lakhs)	
14.	Complete Bid document signed , filled (wherever necessary) and stamped as a token of acceptance	
15.	ISO certificate	
16.	Registration with MNRE/SECI as channel partner or vendor for roof top solar Plant.	

-The bidder has to upload the scanned and digitally signed copies of all relevant documents as mentioned above.

- Price bid (Bill of quantities) has to be filled and put in separate envelope

Summary of Past Work Experience

	Name of Work Order awarding organisation	PSU/ GOVT./ Semi Govt./ State PSU/Autonomous body	Value of the work (annual basis) Rs. Lacs	Duration (from.. to...)	Details, nature of work (as per requirement of satisfaction for PQR	Satisfactory completion certificate attached (Y/N)

Name and Signature of Contractor with seal

Note: - Separate sheets may be attached for furnishing the past work details