



**Reserve Bank of India
Estate Department
Kanpur**

Notice Inviting Tender

Reserve Bank of India, Kanpur invites **E-Tender Partwise (in Part-I & Part-II) for “Design, Supply, Installation, Testing and Commissioning (DSITC) of Grid connected Rooftop SPV based solar power plant of various capacities at Bank’s office premises and residential premises in RBI Kanpur”**. The tendering would be done through the e-Tendering portal of MSTC Ltd. (<http://mstcecommerce.com/eprochome/rbi>). All interested companies/agencies/firms specialized in the field of SITC of Solar Power Plants must register themselves with MSTC Ltd through the above-mentioned website to participate in the tendering process. The Schedule of e-Tender is as follows:

a) E-Tender No	RBI/Kanpur/Estate/189/23-24/ET/265
b) Estimated cost	Rs. 80.7 Lakh
c) Mode of Tender	e-Procurement System Online (Part I - Techno-Commercial Bid and Part II - Price Bid) through www.mstcecommerce.com/eprochome/rbi
d) Date of NIT available to parties to download	July 14, 2023 from 06:00 pm onwards
e) Pre-Bid meeting	Offline at 11:00 AM on August 01, 2023. Venue: Reserve Bank of India, 2nd Floor Estate Department, Mall Road, Kanpur.
f) 1) EMD through DD//NEFT or Banker’s Cheque issued by a Scheduled Bank and intimate/forward the transaction details (UTR number OR scanned copies (in PDF) of DD) to estatekanpur@rbi.org.in and upload on www.mstcecommerce.com/eprochome/rbi	Rs. 1,61,400/- by NEFT in our A/c No. 186003001, IFSC RBIS0KNPA01(where ‘0’ represents zero) from any scheduled Bank.
2) Tender Fees	NIL
g) Last date of submission of EMD.	August 16, 2023 till 01:00 PM
h) Date of Starting of e-Tender for submission of on-line Techno-Commercial Bid and price Bid at e-	August 01, 2023 06:00 PM onwards

Tendering portal of MSTC (http://mstcecommerce.com/eprochome/rbi).	
i) Date of closing of online e-tender for submission of Techno-Commercial Bid & Price Bid.	August 16, 2023 till 01:00 PM
j) Date & time of opening of Part-I (i.e. Techno-Commercial Bid):- And Part-II (Price Bid) Date of opening of Part II shall be informed separately.	August 16, 2023 at 03:30 PM
k) Transaction Fee (To be submitted separately by the vendors to MSTC vide MSTC E-Payment Gateway for participating in the E-Tender)	As applicable in MSTC Ltd. Payment of Transaction fee can be made through MSTC payment gateway /NEFT/RTGS in favor of MSTC LIMITED.

Intending tenderers shall pay as earnest money a sum of Rs. 1,61,400/- by NEFT in our A/c No. 186003001, IFSC RBIS0KNPA01(where '0' represents zero) from any scheduled Bank.

Applicants intending to apply will have to satisfy the Bank by furnishing documentary evidence in support of their possessing required eligibility and in the event of their failure to do so, the Bank reserves the right to reject their bids. Tenders without EMD will not be accepted under any circumstances.

The Bank is not bound to accept the lowest tender and reserves the right to accept either in full or in part any tender. The Bank also reserves the right to reject all the tenders without assigning any reason thereof.

Any amendments / corrigendum to the tender, if any, issued in future will only be notified on the RBI Website and MSTC Website as given above and will not be published in the newspaper.

**Regional Director
Reserve Bank of India
Kanpur**



संपदा विभाग
Estate Department
भारतीय रिजर्व बैंक,
Reserve Bank of India, Kanpur

E-Tender For

Design, Supply, Installation, Testing and Commissioning of Grid connected, rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in RBI Kanpur

Part -I

Name of Tenderer: _____

Address: _____

Date of Pre Bid Meeting (offline) : August 01, 2023 at 11:00 AM.

Due date and time for Submission of e- Tender : August 16, 2023 till 01:00 PM..

Date of opening of Part- I of e-Tender : August 16, 2023 at 03:30 PM.

Venue: 2nd Floor, Estate Department
Reserve Bank of India,
Mahatma Gandhi Marg
Kanpur -208001

SCHEDULE OF TENDER (SOT)

i.	e-Tender no	RBI/Kanpur/Estate/ 189 /23-24/ET/265
ii.	Mode of Tender	e-Procurement System (Online Part I –Pre qualification criteria and Techno-Commercial Bid and Part II - Price Bid through www.mstcecommerce.com/eprochome/rbi)
iii.	Tender Value	Rs 80.70 Lakhs
iv.	Date of NIT available to parties to download	July 14, 2023 from 06:00 pm onwards
v.	Earnest Money Deposit	Rs 1,61,400/- from each bidder to be deposited to Bank's account no. 186003001 IFSC RBIS0KNPA01 , (Please read 0 as zero) through NEFT before last date of submission of tender and its proof of remittance shall be sent to estatekanpur@rbi.org.in .
vi.	Pre Bid Meeting	11:00 AM (Offline) on August 01, 2023 at Estate Department Reserve Bank of India, Kanpur.
vii.	Date of Starting of e-Tender for submission of online Techno-Commercial Bid and price Bid at www.mstcecommerce.com/eprochome/rbi	August 01, 2023 06:00 PM onwards
viii.	Date of closing of online e-tender for submission of Techno-Commercial Bid & Price Bid.	August 16, 2023 till 01:00 PM
ix.	Date & time of opening of Tender Part I	August 16, 2023 at 03:30 PM
x.	Transaction Fee	Payment of Transaction fee as mentioned in the MSTC portal through MSTC payment gateway /NEFT/RTGS in favour of MSTC LIMITED

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IMPORTANT INSTRUCTIONS FOR E-PROCUREMENT

Bidders are requested to read the terms & conditions of this tender before submitting their online tender.

Process of E-tender:

A) Registration: The process involves vendor's registration with MSTC e-procurement portal which is free of cost. Only after registration, the vendor(s) can submit his/their bids electronically. Electronic Bidding for submission of Technical Bid as well as Commercial Bid will be done over the internet. The Vendor should possess Class III signing type digital certificate. Vendors are to make their own arrangement for bidding from a PC connected with Internet. MSTC is not responsible for making such arrangement. (Bids will not be recorded without Digital Signature).

SPECIAL NOTE: THE TECHNICAL BID AND THE COMMERCIAL BID HAVE TO BE SUBMITTED ON-LINE AT www.mstcecommerce.com/eprochome/rbi

1). Vendors are required to register themselves online with www.mstcecommerce.com → *e-Procurement* → *PSU/Govt depts* → *Select RBI Logo* > *Register as Vendor* -- *Filling up details and creating own user id and password* → *Submit*.

2). Vendors will receive a system generated mail confirming their registration in their email which has been provided during filling the registration form. In case of any clarification, vendors may contact RBI/MSTC, (before the scheduled time of the e- tender).

Contact person (RBI):

1. Ms. Mansi Jain, A.M (Electrical)
(mansij@rbi.org.in) Mob:7665538104
2. Shri. Apoorv Sachan, (apoorvsachan@rbi.org.in)
Mob:8424058450
(JE (Electrical), Estate Department)
3. Shri Abhishek Thakur (abhishekthakur@rbi.org.in)
Mob: 9472798334

Contact for any issue on MSTC

(IVR) 07969066600

Contact person (MSTC Ltd):

1. Mr Vijoyant Narayan Singh, Executive, 09909080178
2. Mr Rohit Kr Singh, Assistant Manager, 0522-42447/9886056499
3. Mr Nitin Anand, Manager, 0522-4240445

B) System Requirements:

- i) Windows 7 or above Operating System

- ii) IE-7 and above Internet browser.
- iii) Signing type digital signature
- iv) Latest updated JRE 8 (x86 Offline) software to be downloaded and installed in the system.

To disable “Protected Mode” for DSC to appear in the signer box following settings may be applied.

- Tools => Internet Options => Security => Disable protected Mode If enabled- i.e, Remove the tick from the tick box mentioning “Enable Protected Mode”.

Other Settings:

- Tools => Internet Options => General => Click on Settings under “browsing history/ Delete Browsing History” => Temporary Internet Files => Activate “Every time I Visit the Webpage”.

To enable ALL active X controls and disable ‘use pop up blocker’ under Tools→ Internet Options→ custom level (Please run IE settings from the page www.mstcecommerce.com once)

The Techno-commercial Bid and the Price Bid shall have to be submitted online at www.mstcecommerce.com/eprochome/rbi .Tenders will be opened electronically on specified date and time as given in the Tender.

All entries in the tender should be entered in online Technical & Commercial Formats without any ambiguity.

Special Note towards Transaction fee:

The vendors shall pay the transaction fee using “**Transaction Fee Payment**” Link under “My Menu” in the vendor login. The vendors have to select the particular tender from the event dropdown box. The vendor shall have the facility of making the payment either through NEFT or Online Payment. On selecting NEFT, the vendor shall generate a challan by filling up a form. The vendor shall remit the transaction fee amount as per the details printed on the challan without making change in the same. On selecting Online Payment, the vendor shall have the provision of making payment using its Credit/ Debit Card/ Net Banking. Once the payment gets credited to MSTC’s designated bank account, the transaction fee shall be auto authorized and the vendor shall be receiving a system generated mail. **Transaction fee is non-refundable.** A vendor will not have the access to online e-tender without making the payment towards transaction fee.

NOTE

Bidders are advised to remit the transaction fee well in advance before the closing time of the event so as to give themselves sufficient time to submit the bid.

Information about tenders /corrigendum uploaded shall be sent by email only during the process till finalization of tender. Hence the vendors are required to ensure that their Email ID provided is valid and updated at the time of registration of vendor with MSTC. Vendors are also requested to ensure validity of their DSC (Digital Signature Certificate).

E-tender cannot be accessed after the due date and time mentioned in NIT.

Bidding in e-tender:

- a) **Earnest Money Deposit** shall be remitted to Bank Account of Reserve Bank of India, Kanpur. The account details for NEFT/RTGS transactions are as follows. Bidders are advised to remit EMD well in advance to avoid last minute hassle.

Account Name: Reserve Bank of India Kanpur

Account type : Current Account

Account No : 186003001

IFSC Code: RBIS0KNPA01 , (Please read 0 as zero)

Remarks: Solar Plant at RBI, Kanpur

Proof of remittance with transaction number (Scanned copy) shall be attached/uploaded.

The bidders are also advised to send the proof of remittance with transaction number (scanned copy) to estatekanpur@rbi.org.in.

No interest will be paid on EMD. EMD of the unsuccessful vendor(s) will be refunded by the tender inviting authority in due course.

- b) The process involves Electronic Bidding for submission of Technical and Commercial Bid.
- c) The vendor(s) who have submitted transaction fee can only submit their Technical Bid and Commercial Bid through internet in MSTC website www.mstcecommerce.com → e-procurement → PSU/Govt depts → Login under RBI → My menu → Auction Floor Manager → live event → Selection of the live event.
- d) The vendor should have running JAVA application. This exercise has to be done immediately after opening of Bid floor. Then they have to fill up Common terms/Commercial specification and save the same. After that, they should click on the Technical bid. If this JAVA application does not run, then the vendor will not be able to save/submit his Technical bid.
- e) After filling the Technical Bid, vendors have to click 'save' for recording the same. Once the Commercial Bid link becomes active and the details are filled up, vendors have to click on "save" to record the Commercial bid. After both the Technical bid & Commercial bid have been saved, vendor has to click on the "Final submission" button to register the bids
- f) Vendors are instructed to use *Attach Doc button* to upload documents. Multiple documents can be uploaded.
- g) In all cases, vendors are advised to use their own ID and Password along with Digital Signature at the time of submission of their bids.
- h) During the entire e-tender process, the vendors will remain completely anonymous to one another and also to everybody else.

- i) The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned above.
- j) All electronic bids submitted during the e-tender process shall be legally binding on the vendor. Any bid will be considered as the valid bid offered by that vendor and acceptance of the same by the Buyer will form a binding contract between Buyer and the Vendor for execution of supply.
- k) It is mandatory that all the bids are submitted with digital signature certificate otherwise the same will not be accepted by the system.
- l) Buyer reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof.

No deviation of the terms and conditions of the tender document is acceptable.

Submission of bid in the e-tender floor by any vendor confirms his acceptance of terms & conditions for the tender. Any order resulting from this tender shall be governed by the terms and conditions mentioned therein. The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of bid(s) without assigning any reasons thereof.

Vendors are requested to read the vendor guide and see the video in the page www.mstcecommerce.com/eprochome to familiarize them with the system before bidding.

Vendors are requested to quote rate including GST for each item as specified in the portal. No change in quoted rates will be accepted.

Articles of Agreement

ARTICLES OF AGREEMENT made the _____ day of _____ between the Reserve Bank of India,having its Central Office at Mumbai (hereinafter called "the Employer") of the one part and _____ (hereinafter called "the Contractor") on the other part.

WHEREAS **the Employer is desirous of (describing the work)**_____ and has caused drawings and specifications describing the work to be done. and the schedule of quantities have been signed by or on behalf of the parties hereto.

AND WHEREAS the Contractor has agreed to execute upon the subject work to the conditions set forth herein and to the conditions set forth in the special conditions and in the schedule of quantities and conditions of Contract as modified and finally accepted by both the parties (all of which are collectively hereinafter referred to as "the said Conditions") the works shown upon the said drawings and/or described in the said Specifications and included in the Schedule of quantities at the respective rates therein set forth, amounting to the sum of Rs. ----- or such other sum as shall become payable there under **(hereinafter referred to as, the said Contract Amount)**.

NOW IT IS HEREBY AGREED AS FOLLOWS -

In consideration of the said Contract amount to be paid at the times and in the manner set forth in the said conditions, the Contractor shall, upon and subject to the said conditions, execute and complete the work shown upon the said drawings and described in the said specifications and the schedule of quantities.

2.1 The Employer shall pay the Contractor the said Contract amount or such other sum as shall become payable at the times and in the manner specified in the said conditions.

2.2 The term "Architect" in the said conditions shall mean CGM, Premises Department, Central Office, Reserve Bank of India and on his ceasing to be the architect for the purpose of this Contract for whatever reason, such other person or persons as shall be nominated for that purposes by the Employer, not being a person to whom the Contractor shall object for reasons considered to be sufficient by the Employer PROVIDED ALWAYS that no person or perhaps persons subsequently appointed to be architect under this Contract shall be entitled to disregard or overrule any previous decisions or approval or direction given or expressed in writing by the architect for the time being.

2.3 The said Conditions and Appendix thereto shall be read and construed as forming part of this agreement and the parties hereto shall respectively abide by, submit themselves to the said conditions and perform the agreements on their part respectively in the said conditions contained. Tender Part-I and Part-II duly filled by the contractor shall form the part of this agreement

- 2.4 The drawings, agreement and documents mentioned herein shall form the basis of this Contract.
- 2.5 This Contract is deemed to be Item rate Contract for all items of work as described in detail in the bill of quantities and specifications in part I and Part II of the e-Tender documents.
- 2.6 Work order No. _____ dated _____ shall form the part of this agreement
- 2.7 The Contractor shall afford every reasonable facility for carrying out of all works relating to civil works, electrical installations, fittings and other ancillary works in the manner laid down in the said conditions, and shall make good any damages done to walls, floors, etc. after the completion of such works.
- 2.8 The Employer reserves to itself the right of altering the drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out at any time during the currency of Contract, without prejudice to this Contract.
- 2.9 Time shall be considered as the essence of this Contract and the Contractor hereby agrees to commence the work from the day of issue of works order/letter of acceptance as provided for in the said conditions and to complete the entire work within 90 days from the 14th date of issue of work order subject nevertheless to the provision for extension of time in writing by such form (i.e by way of a deed of agreement or by exchange of letters / emails) as may be mutually decided by the parties.
- 2.10 All payments by the Employer under this Contract will be made only at Reserve Bank of India, Kanpur.
- 2.11 All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen in Kanpur and only courts in **Kanpur** only shall have jurisdiction to determine the same.
- 2.12 **Non-disclosure clause** : The Contractor shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructures/ systems /equipment's etc. which may come to the possession or knowledge of the contractor during the course of discharging its contractual obligations in connection with this agreement, to any third party and shall at all times hold the same in strictest confidence. The contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The contractor shall not publish, permit to be published, or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The contractor shall indemnify the employer for any loss suffered by the employer as a result of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the contractor and the Employer shall be entitled to claim damages and pursue legal remedies. The contractor shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under the agreement are fully satisfied. The contractor's obligations with respect to non-disclosure and confidentiality will survive the expiry or termination of this agreement for whatever reason. In witness whereof the parties hereto have executed this agreement on the above-mentioned date.
- 2.13 **Sexual harassment clause:** The Contractor / Agency shall comply with the provisions of "**The Sexual Harassment of women at work place (Prevention, Prohibition and Redressal) Act, 2013**". In case of any complaint of sexual harassment against its employee within the premises of the bank, the complaint will be filed before the Internal Complaints Committee constituted by the Contractor / Agency and the Contractor/Agency shall ensure appropriate action under the said

Act in respect to the complaint. The contractor shall be responsible for educating its employees about prevention of Sexual Harassment at work place and related issues. The Contractor shall be liable for payment of monetary compensation that may be payable to the complainant/victim. Any complaint of sexual harassment from any aggrieved employee of the contractor against any employee of the Bank shall be taken cognizance of by the Regional Complaints Committee constituted by the Bank

- 2.14 **Force Majeure:** If either party is unable to perform its obligations under this Agreement due to the occurrence of an event beyond its control (such as acts of God, war like situations, riots, labor strike, government actions, earthquakes, cyclones, typhoons, and other natural calamities, etc.), that party will not be deemed to have defaulted under this Agreement. Each party agrees to use all reasonable efforts to enable performance under this Agreement to continue. If the period of non-performance due to a force majeure event exceeds 30 days, the party whose ability to perform has not been so affected may, by giving written notice, terminate this Agreement

If the Contractor is a partnership or an individual	IN WITNESS WHEREOF the Employer and the Contractor have set their respective hands to these presents and two duplicates hereof the day and year first herein above written.
If the Contractor is a company	IN WITNESS WHEREOF the Employer has set its hands to these presents through its duly authorized official and the Contractor has caused its common seal to be affixed hereunto and the said two duplicates hereof to be executed on its behalf, the day and year first hereinabove written.

- 2.15 That the several parts of this Contract have been read by the Contractor and fully understood by the Contractor.

Signature Clause

भारतीय रिज़र्व बैंक की ओर से (प्राधिकृत हस्ताक्षरी के हस्ताक्षर एवं मुहर)	कंपनी की ओर से (कंपनी की मुहर सहित प्राधिकृत हस्ताक्षरी के हस्ताक्षर)
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Witness-1

Witness -1

Witness -2

Witness -2

Place:

Date:

Note: Bank reserves the right to modify the contents of the Articles of the Agreement before the agreement is entered with the contractor.

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Section I
Form of e-Tender

Place _____

Date _____

The Regional Director
Reserve Bank of India
Estate Department,
Kanpur, Uttar Pradesh-208001

Dear Sir/Madam,

We have carefully examined the specifications, designs and schedule of quantities relating to the works specified in the memorandum hereinafter set out and having visited and examined the installation site of the works specified in the said memorandum and having acquired the requisite information relating thereto as affecting the e-Tender. We hereby offer to execute the works specified in the said memorandum within the time specified in the said memorandum at the rates mentioned in the attached Schedule of Quantities and in accordance in all respects with specifications, designs and instructions in writing referred to in articles of agreement, general instructions to the Tenderers and special conditions, conditions hereinbefore referred to, specifications, data sheet and schedule of quantities and with such materials as are provided for, by and in all other respects, in accordance with such conditions so far as they may be applicable.

Memorandum

(a)	Description of works	Design, Supply, Installation, Testing and Commissioning of Grid connected, Rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in Kanpur
(b)	Estimated cost	Rs. 80.70 Lakhs
(c)	Earnest Money	Rs. 1,61,400/-
(d)	Time allowed for completion of work.	90 days from 14 th day of the date of letter advising acceptance of e-Tender

2. We also agree that our e-Tender will remain **valid for acceptance by the Bank for 90 days from the date of opening of Part I of the e-Tender** and this period of validity

can be extended for such period as may be mutually agreed between the Bank and us in writing.

3. Should this e-Tender be accepted, I/we hereby agree to abide by and fulfil all the Terms and Conditions of the e-Tender and in default thereof, to forfeit and pay to you or your successors, or assignees or nominees such sums of money as are stipulated in the conditions contained in the e-Tender together with the written acceptance of the Contract.
4. I/We understand that you reserve the right to accept or reject any or all the e-Tender either in full or in part without assigning any reason therefor. We have deposited a sum of **Rs. 1,61,400/- through NEFT** as earnest money with the Reserve Bank of India, which amount is not to bear any interest. If we fail to execute the Contract within the prescribed time limit when called upon to do so, or withdraw the bid after opening the commercial bid, we do hereby agree that this sum shall be forfeited by us to the Reserve Bank of India.
5. The e-Tender is submitted in two parts on MSTC portal. Part I contains all commercial terms and conditions and technical particulars and Part II contains only the price bid in the Bank's proforma.

Dated this _____ day of _____ 2023.

For and on behalf of M/s _____

(Signature with seal)

Name _____
Designation _____
Place _____
Date _____

(Certified true copy of the Power of Attorney of the above signatory should be enclosed).

Witnesses

(1) Signature with _____
name, address, and date _____

(2) Signature with _____
name, address and date _____

Section II

Details of Tenderers

A. Particulars of Firm:

Sr. No.	Particulars	To be filled by Tenderer
1.	Whether Original Equipment Manufacturer	
	Or Authorized Dealer (Please submit the certificate of authority)	Indicate Yes/No for certificate of authority)
2.	Composition of the firm (Whether partnership / proprietorship /Public Ltd.)	
3.	Names of the proprietor/ partners / Directors of the firm	
4.	GST Number	
5.	Address of the Firm	
	Telephone	
	Email	
	Fax	

B. The details of bankers are as below:

Sr. No.	Particulars (submit the crossed cancelled cheque)	To be filled by tenderer
1	Name of the Bank	
2	Branch Address	
3	Telephone and fax number	
4	Name of the contact person	
5	Credit facility / overdraft facility enjoyed by firm from the Bank	
6	The period from which the firm has been banking with Bank	

C. Prequalification Criteria:

Following are our Clients for whom we have executed "eligible" works during last 5 years as per the eligibility criteria (Please submit the documentary evidence in support of)

Sr. No.	Details	Client (1)	Client (2)	Client (3)
1	Name of the Client Organization / Firm:			
	Address:			
	Name of the Contact Person:			
	His/her Mobile No.:			
	His/her Fax No.:			
	His/her Telephone No/s.:			
	His/her e-mail ID:			
2	Name of the "eligible" work with brief particulars			
3	Work order No. and date			
4	Cost of the "eligible" work as per work order / letter of award:			
5	Date of commencement			
6	Stipulated date of completion			
7	Actual date of completion			
8	Amount of compensation levied by the client for delayed completion, if any:			
9	Gross value of the work completed and paid for :			

Sr. No.	Details	Client (1)	Client (2)	Client (3)
10	Whether the tenderer has been engaged by the Client for maintenance under Annual Maintenance Contract (AMC) of the commissioned system (please state Yes or No)			

D. Please also provide following details with supporting documents as per prequalification criteria:

1	Work experience in years (please submit old work order of any amount at least 5 years from the date of publish of this tender)	
2	Turnover of the firm for the last 3 years (year wise) and submit the documentary evidence in support of the same duly certified by Chartered Accountant	
	(a) 2022-23	
	(b) 2021-22	
	(c) 2020-21	

E. Service set up details in Kanpur/Lucknow/Delhi-NCR:

Note : All the details must be filled in the tender documents only no separate annexure will be accepted. Only Submit documents in support of details filled above.

Signature of Tenderer with stamp/Date

Section III

General Instructions to Tenderers and Special Conditions

3.1 Commercial conditions:

3.1.1 E-Tenders are invited for Design, Supply, Installation, Testing and Commissioning of Grid connected, rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in Kanpur for an estimated cost of Rs. 80.70 lakh from eligible firms.

3.1.2. Eligibility Criteria:

Online tenders will be allowed to view /download to all firms from 06:00 PM of July 14, 2023. **The firms which do not comply with the following pre-qualification criteria and do not submit EMD will not be considered for opening of their tender Part-II**

- i) **Work Experience:** The intending tenderer must have 5 years of experience in carrying out grid interactive solar power system installation works for office buildings/commercial premises. ***Any one work order for required work completed on or before 31st May 2018.***

AND

- ii) **Qualifying criteria:** The intending tenderer must have executed successfully similar works viz. **Design, Supply, Installation, Testing and Commissioning of grid interactive SPV based Solar Power System** during last five years (**works completed on or after on 31st May 2018**) of value as under:

(a) Three works each costing not less than the amount equal to 40% of the estimated cost

OR

(b) Two works each costing not less than the amount equal to 50% of the estimated cost

OR

(c) One work costing not less than the amount equal to 80% of the estimated cost

- iii) **Turnover:** Minimum yearly turnover of 100% of the estimated cost during last 3 financial years supported by audited financial statements.

AND

- iv) Have Solvency certificate for amount equal to estimated cost

AND

- v) Should have service setup at **Lucknow or Kanpur or Delhi-NCR** for rendering after sales service.

Tenderers should submit the following documents in respect of their eligibility:

- Copies of detailed work order with completion certificate indicating scope and value of qualifying works.
- Work order and completion certificate to determine work experience criteria
- A certificate issued by Chartered Accountant indicating turnover for last three years along with the audited Financial statement for the same period.

- Should furnish solvency certificate issued by the Applicant's banker, specifically for the purpose of the empanelment/work, for an amount equal to estimated cost of the work.
- Proof for service set up at Kanpur/Lucknow/Delhi-NCR
- Duly filled, stamped, and signed Part 1 of the tender (All pages) and corrigendum if any (All pages)

A Tender submitted by a firm who is found to be **not** satisfying the above criteria will be rejected.

Note: The client's certificate issued by the private organizations shall also accompany Tax Deducted at Source (TDS) certificates. Applications/tenders uploaded without the above certificates may be rejected

3.1.3 e-Tender submission:

The e-Tender shall be prepared and submitted online in two parts, viz., Part I and Part II clearly indicating on the covers "Part I – Technical and Commercial" and "Part II – Prices", respectively on MSTC portal. Telegraphic, Fax and E-mail e-Tenders will not be accepted. Insertions, postscripts, additions and alterations shall not be valid unless confirmed by the e-Tenderer's signature. All copies of the e-Tender should be complete in all respects with all attachments/ enclosures/ annexures..

Tenderers are advised to submit e-Tender on MSTC website (www.mstcecommerce.com) If applicants desire to submit additional information, they may upload the same on MSTC website on their own letter head/ paper. Each page of the forms shall be signed and submitted.

- 3.2 **Pre-Bid Meeting:** A pre-tender briefing meeting(off-line) of the intending tenderers will be held at 11:00 hours on August 01, 2023 in **Estate Department, Reserve Bank of India, Kanpur** to clarify any point/doubt raised by them in respect of the tender. No separate communication will be sent for this meeting. All the intending tenderers are advised to be present and study the tender documents. They may indicate any points/conditions/specifications which need to be clarified during the meeting. These issues will be discussed, and all the tenderers will be advised suitably. The tenderers are expected to get all the issues clarified during this meeting and therefore should desist from deviating from the Bank's tender conditions/specifications in their technical (Part I) and Price bids (Part II)

- 3.3 The E-Tender should be submitted / uploaded till 1:00 PM on August 16, 2023. No tender will be received/accepted after 1:00 PM on August 16, 2023 under any circumstances whatsoever.
- 3.4 a) Intending tenderers shall remit as Earnest Money a sum of Rs. **1,61,400/- (Rupees one lacs sixty-one thousand four hundred only)** by **NEFT** along with Part I of the tender. The Earnest Money Deposit of the successful tenderer shall be held by the Bank as security for the execution and due fulfilment of the Contract. No interest shall be paid on the said deposit. Under no circumstances Earnest Money Deposit will be accepted in the form of fixed deposit receipts or insurance guarantee or cheque or cash. EMD will be released after virtual completion of the work.
- b) On receipt of intimation from the Bank of the acceptance of his / their e-Tender, the successful Tenderer shall be bound to implement the contract and within fourteen days thereof. The successful Tenderer shall sign an agreement in accordance with the draft agreement and the Schedule of Conditions but the written acceptance by the Reserve Bank of India of a e-Tender will constitute a binding contract between the Reserve Bank of India and the person so Tendering whether such formal agreement is or is not subsequently executed.
- c) All compensation or other sums of money payable by the contractor to the Bank under the terms of this Contract may be deducted from his earnest money and the security deposit if the amount so permits and the Contractor shall, unless such deposit as become otherwise payable, within ten days after such deduction make good in cash the amount so deducted.

3.5 Part I – Technical & Commercial

3.5.1 Part I shall contain the unpriced e-Tender consisting of scope of works as specified and documents and commercial terms and conditions, technical aspects of the tender such as equipment data sheets, tests and inspection, makes of materials, technical description, drawings etc.

3.5.2 Part I of the tender shall form EMD and **Pre-Qualification documents** of the e-Tender to be uploaded in MSTC portal shall contain the following over and above the documents mentioned elsewhere in this tender document:

- a) Power of Attorney/authorisation with the seal of the company/firm in the name of the person signing the e-Tender documents.
- b) List of deviation, if any, in commercial/technical specification.
- c) Detailed proposed **layout drawing** and full equipment details.

- d) A letter from the OEM, authorising the bidder to participate in the e-Tender along with a copy of the agreement with the OEM as regards implementation of similar projects in India and their after sales service
- e) **Guaranteed DC power generation capacity** of the entire system in KWp (Annexure-B)
- f) **Detailed specifications** of each of the offered items such as SPVs, Arrays, PCUs, control panels, control & monitoring systems, cables etc. matching with the specifications contained under this contract along with manufacturer's catalogue / product brochure. If there are some variations in specifications and dimensions of the equipment / products as contained under the manufacturer's catalogue / product brochures Vis-a vis those given under the specifications contained under this e-Tender document, the specifications and dimensions given in this e-Tender document shall prevail.
- g) **Complete technical details** and any special features proposed for incorporation must be given for full technical evaluation. Supporting documents for the claimed facilities/ features shall also be attached while submitting the technical bid.
- h) **Product support for twenty-five (25) years shall be given.** Tenderer shall specifically indicate the product support offered against this e-Tender & submit an undertaking in this regard. (Annex.-C & D)
- i) The e-Tenderer should have maintenance set-up at **Kanpur or Lucknow or Delhi-NCR**. Address, telephone, and e-mail address of maintenance set-up shall be indicated.
- j) Technical data sheet as given under Annexure-A shall be filled up giving full information.
- k) Other Certificates / Declarations as per Annexures enclosed to be submitted.
- l) Duly filled in and signed copies of client's reports (from two clients in the attached format, for whom similar works is executed) and Banker's certificate in separately sealed envelopes.

3.5.3 Tenderers are advised to visit the site of installation and acquaint themselves of the site conditions before Tendering.

3.5.4 The Tenderers are advised to submit the e-Tender based strictly on the General Conditions of the Contract and Technical Specifications contained in the e-Tender documents, and not to stipulate any deviations. If acceptance of the terms and conditions given in the e-Tender documents has any price implications, the same

should be considered and included in the quoted price. **Any Tender containing deviation from the terms and conditions is liable for rejection.**

3.5.5 The e-Tenderers shall submit full details of the patent, trademark, registered design, intellectual property rights, copy rights, industrial property rights held by them or used by them of any third party with regard to design or any part of the system.

3.5.6 All information, correspondence letters shall be addressed to **Regional Director, Reserve Bank of India, Estate Department, Kanpur.**

3.6 **Part II - Price**

Part II – “Price bid”, supplied along with the e-Tender.

- (a) This part shall contain prices in Indian Rupees only with break-up of price as per format (Part II). No other enclosure is permitted in Part II. Change of terms and conditions and technical deviations, if any, found in Part II of the e-Tender will not be taken into account and will be treated as null and void.
- (b) If any of the documents is missing or unsigned, the e-Tender may be considered invalid by the Bank in its discretion.
- (c) All erasures and alterations made while filling the e-Tender must be attested by initials of the Tenderer. Overwriting of figures is not permitted. Failure to comply with either of these conditions will render the e-Tender void at the Bank's option.
- (d) No request for any change in rate or conditions after the opening of the part II of the e-Tender will be entertained.
- (e) The rates quoted shall be deemed to be for the finished work and shall be firm and binding without any escalation whatsoever till the system is handed over to the Bank.
- (f) For any item, if the rate and amount do not tally with respect to the quantity, then the amount arrived based on quoted rates shall only be acceptable and in case of variation of rates in figures and words, the rate quoted in words will only be considered for arriving at the total amount for that item.

3.8 **Opening of e- Tender**

Part I of the e-Tenders will be opened online on August 16, 2023 at 03:30 PM. Price bid (Part II) of only those e-Tenderers who are found eligible after scrutiny of their Part I of the Tenders will be opened on a subsequent working day which will be intimated to all the eligible Tenderers.

3.9 **Brief Scope of Work**

3.9.1 The scope of work shall include the following.

- Design and Delivery of all equipment, materials for the captioned work to Bank's site at Kanpur (i.e. RBI office premises and mentioned three Residential colonies) including insurance, packing, handling, transporting, loading / unloading etc. at site.
 - Erection, Testing, Commission of Solar Power System and handing over the system to Bank.
 - Providing regular Inspection and Upkeep of system inclusive of periodic service etc.
 - Approval, if any, of local statutory authorities (KESCO) for connection to the grid.
- 3.9.2 The Tenderer should indicate the complete description of the working of the system / sub systems and their power requirements with all relevant brochures/literature etc. in addition to those called for in the Technical Specifications:
- 3.9.3 The Tenderer shall carefully check the specifications and shall satisfy himself that the equipment offered is suitable as per the Bank's Technical Specifications.
- 3.9.4 Tenderer shall supply all tools, plants, scaffolding, labour, and consumables etc as required for installation, testing and commissioning of the system.

3.10 Validity of e-Tender

The e-Tender along with the prices shall remain valid initially for a period of 90 days from the date of opening of Part I of e-Tender, which period may be further extended by mutual agreement in writing by the Tenderer shall not cancel or withdraw the e-Tender during this period.

3.11 Lowest e-Tender Not Necessarily To Be Accepted

- 3.11.1 The Bank is not bound to accept the lowest or any e-Tender or to assign any reason for non-acceptance.
- 3.11.2 The Tenderers shall not be entitled to claim any costs, charges, damages and expenses of and incidental to or incurred by him through or in connection with his submission of e-Tenders, even though the Bank may elect to modify/withdraw the e-Tender.

3.12 Earnest Money, Security Deposit & Security during Defect liability period

- 3.12.1 All Tenderers shall deposit Earnest Money of **Rs. 1,61,400/-** through NEFT and details of NEFT (scan copy) shall be uploaded with the tender or send through email at esatekanpur@rbi.org.in **before 01:00 PM of last date of submission of e-tender** The EMD paid by the tenderer shall be held by the Reserve Bank of India as security for the execution and due fulfilment of the Contract. No interest shall be

paid on the said deposit. Under no circumstances, Earnest Money Deposit will not be accepted in the form of fixed deposit receipts or insurance guarantee or cheque or cash. EMD of successful bidder will be released after virtual completion of the work & submission of Bank Guarantee of 10% of the contract value as Security as mentioned in clause No. 3.12.3. The EMD of unsuccessful tenderer shall be released on acceptance of the tender.

3.12.2 All compensation or other sums of money payable by the Contractor to the Employer under the terms of this Contract may be deducted from the security deposit, if the amount so permits unless the contractor deposits such amounts in cash within ten days of issue of demand notice by the Bank.

3.12.3: The Tenderer shall furnish a **Performance Bank guarantee (PBG)**, within **10 days** after completion of the work, from any scheduled Bank amounting to 10% of the contract amount shall initially, remain valid for 05 years from the date of commissioning & handing over of the system. In case of any delay in submission of the PBG, penalty will be deducted from the bills of the contractor at Bank rate. Thereafter, contractor shall submit a fresh PBG for amounting 50% of the original PBG amount **before four weeks of expiry of initial PBG** and shall be valid for next 05 years. If the contractor fails to submit a fresh PBG within the time limit, RBI Kanpur will have the whole right to invoke the earlier BG. RBI Kanpur has the right to invoke the PBG to compensate any fault/ penalty by the contractor.

3.13 **Terms of Payment**

The payment for the works to be executed under this contract shall be made as follows subject statutory deductions. No variation in the mode of payment will be acceptable.

- 1) **60% of** the quoted rates after receipt of the material at site and on submission of the following documents:
 - a) Manufacturer's Inspection and Test Certificates
 - b) **Contractor's Certificate** that all components, parts, sub systems, consumables etc. for successful installation, commissioning and testing of the systems including maintenance have been received at site in good condition and if any shortfall is noticed during installation, commissioning and testing they will be supplied free to the Bank

c) Policies of insurance as per e-Tender conditions.

- 2) **Balance 40%** of the quoted rates after erection, testing and commissioning and handing over of the entire system and submission of PBG as per clause 3.12.3.

3.14 Taxes

3.14.1 The prices quoted shall be deemed to include GST. If the Tenderer fails to include such taxes and duties in the e-Tender, no claim thereof will be entertained by the Bank afterwards. As per Indian laws, income tax will be deducted at source and a certificate for the same will be issued to the contractor.

3.15 Insurance

The contractor shall, before commencement of the works, submit requisite insurance, and hence insure the works at his cost and keep them insured until the virtual completion of reworks, against loss or damage by fire with an office in the **joint names of the employer and the contractor (the name of the former i.e. RBI being placed first in the policy) for the full amount of the contract**. Such policy shall cover the property of the "Employer" only. The contractor shall deposit the policy and receipts for the premium with the employer **within fourteen days** from the commencement of the works. In default of the contractor, insuring as provided above, the employer may so insure the works and may deduct the premium paid from any moneys due, penalty etc., or which may become due to the Contractor without prejudice to the other rights of the Employer in respect of such default. In case it becomes necessary to suspend the works, the Contractor shall as soon as the claim under the policy is settled, or the work reinstated by the Insurance Office, should they elect to do so, proceed with all due diligence with the completion of the works in same manner as though the fire had not occurred and in all respects under the same conditions of Contract. The Contractor in case of rebuilding or reinstatement after fire shall be entitled to such extension of time for completion as deems fit.

The contractor shall take all insurances, before commencement of work, at his cost to cover all kinds of risks from the time the equipment's/materials leave the manufacturer's works till handing over the said system to the Bank, in the joint names of the Bank and the contractor and it shall cover the following risks.

- Contractor's All Risk Policy, for full contract amount.
- Workmen compensation policy for the employees of the contractor at site.
- Third party liability policy for a total of Rs.10.00 lakh and with a limit of Rs. 2.50 lakh per accident.

Note: These policies shall be valid till the completion of the work & in the joint name of RBI with RBI's name being the first one. If the contractor does not provide these policies, the Bank reserves the right to take the above insurance policies themselves and recover the cost thereof from the bill of the contractor or any other action.

3.16 Completion Period

3.16.1 Time allowed for carrying out the work, as mentioned in the Memorandum, shall be strictly observed by the Contractor and it shall be reckoned from the 14th day of written order to commence the work is issued.

3.16.2 Damages for non-completion

The work shall throughout the stipulated period of the contract be preceded with all the diligence and if the contractor fails to complete the work within the specified period, he shall be liable to pay liquidated damages at the rate **0.25% of contract amount per week** for the period during which the said works shall so remain incomplete subject to a maximum of 10% of the contract amount and the Employer may deduct such damages from any money due to the Contractor.

3.16.2 The contractor shall submit a Bar Chart for completion of the work within the contractual completion period from the tenth day of letter of intent. Such chart shall include all activities like the date of supply of material at site, item wise completion of work etc., and obtain the approval of the Bank.

3.16.3 Bank will provide storage space within the compound of the building. However the responsibility and safety of the materials stored will be with the contractor. No accommodation will be provided for any worker by the Bank.

3.17.1 Warranty/ Defects Liability Period.

3.17.2 (a) The entire system shall be warranted against any manufacturing/design/ installation defects etc. for a **minimum period of one year**. During this period any defect observed in the system shall be rectified **within 2 days** of the observation without any additional cost to the Bank.

(b) Supply and replacement of all spares, consumables and parts required for smooth operation and serviceability of the machine shall be the responsibility of the contractor during this period. In this respect the contractor shall maintain sufficient spares/consumables for immediate replacement of defective / damaged part during day-to-day routine maintenance / breakdown maintenance. Cost of these spares

and any other spares which may be required during maintenance is deemed to be included in the rates quoted by the contractor. The periodicity of service shall be bi-monthly or more depending upon the weather conditions.

(c) Penalty for delay in rectification of fault during DLP:

There will be a penalty of Rs.500/- per day subject to maximum of 50 % of the annual maintenance charges, if the defect in the system is not rectified within the period of 2 days during the DLP period. Any penalty during the DLP shall be recovered from any dues payable to the contractor or invoke from the bank guarantee.

3.17.3 PV modules used in solar power systems / systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

3.17.4 Penalty for Reduced Generation during initial 5 years:

As mentioned under the foregoing paragraphs, the successful Tenderer is required to commit guaranteed average annualized energy of specified KWH per year at synchronization point. Failure to do so will make the contractor liable to pay compensation at double the rate of the prevailing tariff of Electricity supply Agency for shortfall of every KWH or part thereof of the power generated.

Penalty shall be derived as per the following formula:

$$\begin{aligned}\text{Actual output for the year under reference} &= A \text{ (KWH)} \\ \text{Guaranteed output of the system as per the contract} &= B \text{ (KWh)} \\ \text{Compensation to be paid to RBI in case of reduced generation (Rs)} &= (B-A) \times (\text{Tariff} \times 2)\end{aligned}$$

3.18. Comprehensive Annual Maintenance Service Contract (CAMSC) after DLP period

(a) The Tenderers shall quote their charges separately for comprehensive annual maintenance service of complete system as per schedule of quantities which will be applicable after the end of defect liability period (DLP). The rates shall also include the charges for the insurance of the workmen for carrying out the above job and GST in respective column in the BOQ in MSTC portal.

(b) The system shall be inspected, upkeep/serviced/cleaned periodically. The periodicity shall be **bimonthly or earlier** depending upon the weather conditions.

(c) The charges for comprehensive annual maintenance service shall include replacement of any part of the system, including all required spares, consumables data charge for facilitating remote monitoring etc., during service contract period. Any defects in the system/sub-assemblies, found within the AMC period, shall be rectified / replaced by the Tenderer without any additional cost to the Bank

(d) Penalty for delay in rectification during CAMS:

During the comprehensive annual maintenance service period (after DLP period), any fault in the system shall be rectified within 02 days of receipt of intimation of the defect in the system. The quoted rates shall, therefore, take into account all the cost, including travel cost from the nearest service station. There will be a penalty of **Rs.500/- per day subject to maximum of 10%** of the annual maintenance charges, if the defect in the system is not rectified within the period of 02 days during the AMC period as stated above. Any penalty during the AMC shall be recovered from any dues payable to the contractor or invoke from the bank guarantee.

(e) Payment of service charges during comprehensive annual maintenance contract (CAMC):

The payment during the CAMC period shall be **made on half yearly basis** on rendering satisfactory service.

(g) The service contract shall be renewed for a further additional period of at least 8 years after the initial annual service contact period of one year after one-year warranty. While renewing the contract the new contract amount will be arrived at based on following formula:

$AC = AP [(15+60x(EPIC/EPIP)+25x(CPIC/CPIP))] \times 1/100$	
AC	The contract amount for the current year.
AP	The contract amount for the previous year.
EPIC	Wholesale Price Index for Electrical Products 6 months prior to the commencement date of contract for the current year.
EPIP	Wholesale Price Index for Electrical Products 6 months prior to the commencement date of contract for the previous year.
CPIC	Consumer Price Index for Industrial Workers (All India Average) 6 months prior to the commencement date of contract for the current year.

CPIP	Consumer Price Index for Industrial Workers (All India Average) 6 months prior to the commencement date of contract for the previous year.
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The successful Tenderer shall enter into an agreement for comprehensive annual maintenance contract of the system with the Bank.

3.19 **Packing and Despatch**

The equipment shall be properly and securely packed in boxes and multiple handling and transportation by sea/ air / rail / road under Indian conditions. All equipment/components shall be delivered at the Bank's office building, Kanpur.

3.20 **Signing of Contract Agreement**

The General instructions to the Tenderers and special conditions, conditions hereinbefore referred to Conditions of Contract and Technical Specifications and drawings enclosed with the e-Tender documents, the subsequent correspondence exchanged between the Bank and the Tenderer, and the work order placed shall be the basis of the final contract to be entered into with the successful Tenderer.

- 3.20.1 The Tenderer shall go through the terms and conditions given in the general conditions of contract herewith and his offer shall be strictly in line with the terms specified therein. No deviation from the terms and conditions specified shall be acceptable. Each page of the e-Tender documents should be signed for his/their having acquainted himself/themselves in the general conditions of contract, technical specifications, etc.
- 3.20.2 The e-Tender submitted on behalf of a firm shall be signed by all the partners of the firm or a partner who has the necessary authority on behalf of the firm to enter the proposed contract. Otherwise, the e-Tender may be rejected.
- 3.20.3 On receipt of intimation from the Bank of the acceptance of his/their e-Tender, the successful Tenderer shall be bound to implement the Contract and within fourteen days thereof, the successful Tenderer shall sign an agreement in accordance with the draft agreement. Notwithstanding the signing of the agreement the written acceptance by the Reserve Bank of India of an e-Tender will constitute a binding agreement between the Reserve Bank of India and the person so e-Tendering, whether such contract is or is not subsequently executed.
- 3.20.4 The contractor shall not assign the contract. He shall not sublet any portion of the contract except with the written consent of the Employer. In case of breach of these conditions, the Employer may serve a notice in writing on the Contractor rescinding

the contract whereupon the security deposit shall stand forfeited to the Employer, without prejudice to his other remedies against the Contractor.

3.21 **Sufficiency of Schedule of Quantities**

3.21.1 The Contractor shall be deemed to have satisfied himself before e-Tendering as to the correctness and sufficiency of his e-Tender for the works and of the prices stated in the Schedule of Quantities and/or the Schedule of Rates and Prices which rates and prices shall cover all his obligations under the Contract, and all matters and things necessary for the proper completion of the works.

3.21.2 The quantities in the schedule of quantities approximately indicate the total extent of work but may vary to any extent and even be omitted thus altering the aggregate value of the contract.

3.22 **Language**

The e-Tender including all labels in drawings, documents, catalogues etc. shall be in English.

3.23 **Right to Accept Part e-Tender**

The Bank reserves the right to accept the e-Tender either in whole or in part at the same prices quoted by the Tenderer.

3.24 **Evaluation of e-Tender**

E-Tender will be evaluated based on capital cost of the system and taking into account the effect of comprehensive annual maintenance service charges (CAMC) for 9 years and one-year DLP. E-Tender will, therefore, be evaluated based on the total owning cost for 10 years which will be arrived at as under:

Total owning cost = Quoted capital cost + NPV of service contract charges for 9 years = Quoted capital cost + Quoted charges for Comprehensive maintenance service contract per annum x Multiplying Factor (MF)

(MF = 7.0476)

For calculating the NPV of service contract charges, the following factors have been applied:

(a)	Increase (Escalation)	5% per annum
(b)	Discount factor	8% per annum

(c)	Period of contract	10 years from the date of handing over of the system.
(d)	Payment terms for annual maintenance contract.	Half yearly payment after satisfactory completion of service

Minimum Base Rate for Comprehensive AMC

Minimum Base Rate for Comprehensive AMC is 2% of total capital cost In case, the tenderer quotes the rates for comprehensive AMC lower than 2% of the quoted capital cost, then the 2% of the quoted capital cost will be considered as CAMC charges for calculation of Total Cost of Ownership.

Note: Notwithstanding the above, the Bank shall pay only the quoted rate of the CAMC during the currency of the committed contract period subject to renewal formulae indicated in the tender.

3.25 Pre dispatch Inspection

Before dispatching the equipment to site, the equipment, will be inspected at the discretion of the Bank and tested for various parameters by the Bank's Engineers at the manufacturer's site and then cleared for shipment. This will however, not in anyway absolve the contractor of his responsibility for the continued performance of the system/components after erection & commissioning at the designated site during the period of defects liability.

3.26 Drawings

All required drawings for equipment lay out via layout of PV panels, interconnection with Power conditioning units etc., should be prepared by the Tenderer and submitted to the Bank's engineer for approval before commencement of work.

3.27 Other Issues

The Contractor shall carry out all the work strictly in accordance with the approved drawing, detailed specifications, and instructions of the Bank's engineer. If in the opinion of the Bank's engineer/consultant, nominal changes have to be made to suit the site condition and with the prior approval in writing of the Employer, the Contractor shall carry out the same without any extra charge.

3.28 The Tenderer are requested to examine the drawings, inspect the site of the work, and acquaint himself with all local conditions, means of access to the work, nature of the work etc. before submission of e-Tender.

- 3.29 A Schedule of Probable Quantities in respect of each work and Specifications accompany these Special Conditions. The Schedule of Probable Quantities is liable to alteration by omissions, deductions, or additions at the discretion of the Employer. Each e-Tender should contain not only the rates but also the value of each item of work entered in a separate column and all the items should be totalled to show the aggregate value of the entire e-Tender.
- 3.30 The rates quoted in the e-Tender shall include all charges for scaffoldings, watching and lighting by night as well as day including Sundays and holidays, protection of all other erections, matters or things and the Contractor shall take down and remove any or all such centring, scaffolding etc. as occasion shall require or when ordered so as to do, and fully reinstate and make good all matters and things disturbed during the execution of work and to the satisfaction of the Bank.
- 3.31 The contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, whatever the cause of delays may be, including delays arising out of modifications to the work entrusted to him or in any sub-contract connected therewith or delays in awarding contracts for other trades of the project or in commencement or completion of such works. The Employer does not accept liability for any sum besides the e-Tender amount, subject to such variations as are provided for herein.
- 3.32 The successful Tenderer is bound to carry out all items of work necessary for completion of the job even though such items are not included in the quantities and rates. Schedule of instruction in respect of such additional items and their quantities will be issued in writing by the Bank.
- 3.33 **Minimum wages/ Gratuity act / contract labour Act to the workmen:** The contractor shall ensure that minimum wages as per statutory requirement are paid to all the workmen. Also, ESIC coverage shall be ensured to workmen as applicable.
- 3.34 **Labour License:** The contractor shall abide by and fulfil all requirements laid down under the Contract Labour (Regulation and Abolition) Act, 1970 and the rules framed there under and all other relevant statutory acts (such as Minimum Wages Act etc.). and fulfil all statutory requirements if applicable. The quoted rate shall include the amount payable towards ESI, EPF, Bonus or any other compensation etc. payable under various labour laws.

3.35 The successful Tenderer must co-operate with the other contractors appointed by the Bank so that the work shall proceed smoothly with the least possible delay.

Date:

Signature of the firm

Place:

(By a person holding the Authority/Power of attorney)

Section (IV)

Safety Code

1. First-aid appliances, including adequate supply of sterilized dressings and cotton wool, shall be maintained in a readily accessible place.
2. The injured person shall be taken to a public hospital without loss of time, in cases where the injury necessitates hospitalisation.
3. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from ground.
4. No portable single ladder shall be over 8 meters in length, the width between the side rails not less than 30 cm (clear) and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder.
5. The excavated material shall not be placed within 1.5 meters of the edge of the trench or half of the depth of the trench, whichever is more. All trenches and excavations shall be provided with necessary minimum height shall be one metre.
6. Every opening in the floor of a building or a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one metre.
7. No floor, roof or other part of the structure shall be so over-loaded with debris or materials as to render it unsafe.
8. Workers employed on mixing and handling material such as asphalt, cement, mortar or concrete and lime mortar shall be provided with protective footwear and rubber hand-gloves.
9. Those engaged in welding works shall be provided with welder's protective eye-shields and gloves.
10. No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
11. Suitable face masks should be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint dry rubbed and scrapped.
12. Hoisting machines and tackles used in the work, including their attachments, anchorage and supports shall be in perfect condition.
13. The ropes used in hoisting or lowering material or as a means of suspension shall be of durable quality and adequate strength and free from defects.

FIRE SAFETY

- i. Cutting / drilling machine and other electrically operated equipment's used at site shall be plugged into correctly rated electrical outlets.
- ii. Only ISI marked 3 pin plug and other appliances and equipment's shall be used.
- iii. Electrical power cables/wires used shall not have any joints and shall be properly rated.
- iv. All electrical appliances i.e. welding, drilling, cutting machine etc. shall be safely and securely earthed to prevent leakage current while in operation.
- v. Before commencing the welding work for the first time on any day, fire section shall be informed and only after the site inspection by the Fire officers/Personnel, work shall be started.
- vi. Two buckets of water and sand shall be kept in an easily accessible area on the site.
- vii. Fire extinguishers recommended and issued by fire officers shall be kept on the site.
- viii. Used paint drums shall be stored in specified store only after closing them properly.
- ix. Personal protective equipment's such as safety shoes, hand gloves, welder's mask, ear plug etc. depending upon the requirement of the work shall be provided by the contractor to the workmen to prevent occupational health hazards.
- x. The safety belt shall be provided by the contractor and used by the workmen while working from height for more than 10' from Ground level.
- xi. None of the passages near lift lobby and staircases shall be used for stacking / dumping any kind of materials/waste.
- xii. Both the staircase doors shall be normally kept closed.
- xiii. None of the fire extinguishers shall be removed/shifted from its designated location.
- xiv. Power supply shall be switched off from the mains when equipment is not in use.
- xv. Wood-shavings and saw-dust generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.
- xvi. Any debris generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.
- xvii. Battery operated emergency light/torches shall be provided by the contractor to the workmen while working beyond office hours.

Place:

Date:

Seal & Signature of the Tenderer.

Section-V

The Conditions Hereinbefore Referred To

1. In constructing these conditions, the specification, schedule of quantities and Contract Agreement, the following words shall have the meaning herein assigned to them except where subject or context otherwise requires.

- | | |
|---------------------------|---|
| a) "Employer" | Shall mean the Reserve Bank of India and shall include its assignees and successors. |
| b) In the case of company | "Contractor shall mean _____ a company incorporated under _____ and having its registered office at _____ and shall include its successors and assigns. |
| c) "Site" | Shall mean the site of the contract works including any building and erection thereon and any other land (inclusively) as aforesaid allotted by the Employer for the Contractor's use. |
| d) "This Contract" | Shall mean the Article of Agreement, the special conditions, the conditions, the Appendix, the schedule of quantities and specifications attached hereto and duly signed. |
| e) "Notice in writing" | Shall mean a notice in written, typed or printed or written notice" characters sent (unless delivered personally otherwise proved to have been received) by registered post to the last known private or business address or registered office of the addressee and shall be deemed to have been received when in the ordinary course of post it would have been delivered. |
| f) "Act of Insolvency" | Shall mean any Act of insolvency as defined by the Presidency Town Insolvency Act, or the provincial insolvency Act or any Act amending such original Act. |
| g) "Net Prices" | If in arriving at the contract amount the Contractor shall have added to or deducted from the total of items in the e-Tender any sum, either as a percentage or otherwise, then net price of any item in their e-Tender shall be the sum arrived at by adding to or deducting from the actual figures appearing in the e-Tender as the price of that the item a similar percentage or |

proportionate sum provided always that in determining the percentage or proportion of the sum so added or deducted by the Contractor the total amount of the any Prime Cost items and provisional sums of money shall be deducted from the total amount of the e-Tender. The expression "net rates" or "net prices" when used with reference to the contract or account shall be held to mean rates or prices so arrived at.

h) "The works"

Shall mean e-Tender for Design, Supply, Installation, Testing and Commissioning of Grid connected SPV Based Solar Power Plant at Bank's Premises Kanpur-208001

2. **Scope of Contract:** The contractor shall carry out and complete the said work in every respect in accordance with this contract and with the directions of and to the satisfaction of the Bank's Engineer. The Bank's Engineer may in his absolute discretion and from time to time issue further drawings and/or written instructions, details, direction and explanations which are hereafter collectively referred to as "Bank's Engineer's instruction in regard to":

- a) The variations or modifications of the design, quality or works or the addition or omission or substitutions of any work.
- b) Any discrepancy in the Drawing or between the Schedule of Quantities and/or Drawing and/or specifications.
- c) The removal from the site of any materials brought thereon by the contractor and the substitution of any other material therefor.
- d) The removal and/or re-execution of any works executed by the contractor.
- e) The dismissal from the works of any persons employed thereupon.
- f) The opening up for inspections of any work covered up.
- g) The amending and making good of any defects under clause 20 hereof.

The contractor shall forthwith comply with and duly execute any work comprised in such Bank's Engineer's instructions provided always that verbal instructions, directions and explanations given to the Contractor or his representative upon the works by the Bank's Engineer shall, if involving a variation, be confirmed in writing by the Contractor within seven days, such shall be deemed to be Employer's instructions within the scope of the Contract.

The contractor shall submit a statement of variations giving quantity and rates duly supported by analysis of rates, vouchers etc. The rates on scrutiny and final

acceptance by the Employer shall form a supplementary e-Tender. The Employer shall not be liable for payment of such variations until these statements are sanctioned by him.

3. The Contract shall be executed in triplicate and the Bank's Engineer, the Employer and the Contractor shall be entitled to one executed copy each for his use. The contractor shall prepare the line diagram, system configuration drawing and Lay out plan of the site for carrying out the work. Before the issue of the final certificate to the Contractor he shall submit to the Bank's Engineer all Drawings and Specifications.
4. The Contractor shall provide at his cost everything necessary for the proper execution of the works according to the intent and meaning of the Drawings, Schedule of Quantities and specifications taken together, whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred therefrom, and if the Contractor finds any discrepancy in the Drawings or between the Drawings, Schedule of quantities and Specifications, he shall immediately and in writing refer the same to the Bank's Engineer, who shall decide which is to be followed.
5. **Authorities, notices and patents:** The Contractor shall conform to the provisions of any Act of the Legislature relating to the works, and to the regulations and bye-laws of any authority, and of any water, electricity supply and other companies and/or authorities with whose system the structure is proposed to be connected, and shall, before making any variations from the Drawings or Specifications that may be necessitated by so conforming, give to the architect written notice, specifying the variation proposed to be made and the reason for making it and apply for instructions thereon. In case the Contractor shall not within ten days receive such instructions he shall proceed with the work conforming to the provisions, regulations, or bye-laws in question, and any variation so necessitated shall be dealt with under clause 17 hereof.

The contractor shall bring to the attention of the Employer all notices required by the said Acts, regulations or bye-laws to be given to any authority and pay to such authority or to any public office all fees that may be properly chargeable-in respect of the works and lodge the receipts with the Employer.

The Contractor shall indemnify the Employer against all claims in respect of patent rights, and shall defend all actions arising from such claims and shall himself pay all royalties, license fees, damages cost and charges of all and every sort that may be legally incurred in respect thereof.

6. **Setting out of work:** The contractor shall set out the works and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions levels, dimensions and alignment of all parts thereof. If at any time any error in this respect shall appear during the progress of the works or within a period of one year

from the completion of the works, the Contractor shall, if so required, at his own expense rectify such error to the satisfaction of the Bank's Engineer.

7. **Materials and Workmanship to conform to description:** All materials and workmanship shall so far as procurable be of the respective kinds described in the Schedule of Quantities and/or specifications and in accordance with the contract and the Contractor shall furnish to the Employer with all invoices, accounts, receipts and other vouchers to prove that the materials comply therewith. The Contractor shall at his own cost arrange for and/or carry out any test of any materials.
8. **Contractor's superintendence and representative on the works:** The Contractor shall give all necessary personal superintendence during the execution of the works and so long thereafter as the Employer may consider necessary until the expiration of the "Defects Liability Period" stated in the Appendix hereto. The contractor shall, also during the whole time the works are in progress employ a competent representative who shall be constantly in attendance at the works while the men are to work. Any directions, explanations, instructions or notice given by the Bank's Engineer to such representative shall be held to be given to the Contractor.
9. **Dismissal of workmen:** The Contractor shall on the request of the Bank's Engineer immediately dismiss from the works any person employed thereon by him who may, in the opinion of the Bank's Engineer, be incompetent or misconduct himself and such persons shall not be again employed on the works without the permission of the Bank's Engineer.
10. **Access to works:** The Employer, shall at all reasonable times, have free access to the works and/or to the workshops, factories or other places where materials are lying or from which they are being obtained and the Contractor shall give every facility to the Employer necessary for Inspections and examination and test of the materials and workmanship. No person not authorized by the Employer except the representatives of public authorities shall be allowed on the works at any time.
11. **Bank's Engineer:** The term Bank's Engineer shall mean the person appointed and paid by the Employer to inspect the works. The Contractor shall afford the Bank's Engineer every facility and assistance for inspecting the works and materials and for checking and measuring time and materials.

The Bank's Engineer, or the Employer shall have power to give notice to the Contractor or to his representative of non-approval or any work or materials and such work shall be suspended, or the use of such materials shall be discontinued. The work will from time to time be examined by the Assistant Manager (Tech.) but such examination shall not in any way exonerate the Contractor from the obligation to remedy any defects which may be found to exist at a stage of the works or after the same is completed. Subject to the limitations of this clause the Contractor shall take instructions only from the Bank's Engineer.

12. **Assignment and Subletting:** The whole of the works included in the Contract shall be executed by the Contractor and the contractor shall not directly or indirectly transfer, assign or under-let the Contract or any part share thereof or any interest therein without the prior written consent of the Employer and not undertaking shall relieve the Contractor from the full and entire responsibility of the Contract or from active superintendence of the works during their progress.

13. No alteration, omission or variation shall vitiate this contract but in case the Bank's Engineer thinks proper at any time during the progress of the works to make any alterations in, or addition to, or omissions from the works or any alteration in the kind of quality of the materials to be used therein and shall give notice thereof in writing under his hand to the Contractor, the Contractor shall alter, add to, or omit from, as the case may be, in accordance with such notice, but the contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviation from any of the provisions of the Contract. Stipulations, specifications or Contract Drawings without the previous consent in writing of the Employer and the value of such extras alterations, additions or omission shall, in all cases, be determined by the Employer in accordance with the provisions of Clause 17 hereof, and the same shall be added to, or deducted from the Contract Amount, as the case may be accordingly.

14. **Schedule of Quantities:** The Schedule of quantities, unless otherwise stated shall be deemed to have been prepared in accordance with the Standard Method of Measurement.

Any error in description or in quantity or in omission of items from the schedule of quantities shall not vitiate this contract but shall be rectified and the value thereof, as ascertained under Clause 17 hereof, shall be added to, or deducted from the Contract Amount (as the case may be) provided that no rectification of errors, if any, shall be allowed in the Contractor's schedule of rates.

15. **Sufficiency of Schedule of Quantities:** The Contractor shall be deemed to have satisfied himself before e-Tendering as to the correctness and sufficiency of his e-Tender for the works and of the prices stated in the Schedule of Quantities and/or the schedule of rates and prices which rates and prices shall cover all his obligations under the contract, and all matters and things necessary for the proper completion of the works.

16. **Measurement of works:** The Bank's Engineer may, from time to time, intimate to the contractor that he requires the works to be measured, and the Contractor shall forthwith attend or send a qualified agent to assist Assistant Engineer in taking such measurements and calculations and to furnish all particulars or to give all assistance required by any of them.

Should the Contractor not attend or neglect or omit to send such agent then the measurement taken by the Bank's Engineer, or a person approved by him shall be

taken to be correct measurement of the works. Such measurements shall be taken in accordance with the Mode of Measurements detailed in the Specifications.

The Contractor or his Agent may at the time of measurement take such notes and measurement as he may requires.

All authorized extra works, omissions and all variations made with the prior approval in writing of Employer shall be included in such measurements.

17. **Prices for extra:** The Contractor may, when authorized and shall, when directed, in writing by the Employer, add to, omit from or vary the works shown upon the drawings, or described in the specification, or included in the schedule of Quantities, but the contractor shall make no addition, omission or variation without such authorization or direction. A verbal authority or direction by the Bank's Engineer shall, if confirmed by them in writing within seven days, be deemed to have been given in writing.

No claim for an extra shall be allowed unless it shall have been executed under provisions of clause above hereof with the concurrence of the Employer herein mentioned. Any such extra in herein referred to as authorized and shall be made in accordance with the following provisions.

- (a) (i) The net rates or prices in the original e-Tender shall determine the valuation of the extra work where such extra work in similar character and executed under conditions as the work priced therein.
- (ii) Rates for all items, wherever possible should be derived out of the rates given in the priced Schedule of Quantities.
- (b) The net prices of the original e-Tender shall determine the value of items omitted provided if omissions vary the conditions under which any remaining items of works are carried out, the prices for the same shall be valued under sub-clause(c) hereof.
- (c) Where the extra works are not of similar character and/or quoted under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items of works are carried out or if the amount of any omissions or additions relative the amount of the whole of the Contract works or to any part thereof shall be such that in the opinion of the Bank's engineer, the net rate or price contained in the priced Schedule of Quantities or e-Tender or for any item of the works involves loss or expenses beyond that reasonably contemplated by the contractor or is by reason of such omission or addition rendered unreasonable or inapplicable, the Bank's Engineer shall fix such other rate or price as in the circumstances he shall think reasonable and proper, with the prior approval in writing of the Employer.
- (d) Where extra work cannot be properly measured or valued, the Contractor shall be allowed day work prices as the net rates stated in the e-Tender or the Priced

Schedule or Quantities or, if not so stated, then in accordance with the local day work rates and wages for the district provided that in either case vouchers specifying the daily time (the workmen's names) and materials employed be delivered for verification to the Bank's Engineer at or before the end of the week following that in which the work has been executed plus 15% towards establishment charges, contractor's overhead and profits.

The measurement and valuation in respect of the Contract shall be completed within the "period of final measurements" stated in the Appendix or if not stated then within six months of the completion of the Contract works as defined in Clause 21 hereof.

18. Unfixed materials when taken into account to be the property of the Employer

Where in any certificates (of which the Contractor has received payment) the Bank's Engineer has included the value of any unfixed materials included for and/or placed on or adjacent to the works such materials shall become the property of the Employer and they shall not be removed except for use upon the works, without the written authority of the Employer. The Contractor shall be liable for any loss of, or damage to, such materials.

19. Removal of improper work : The Employer shall, during the progress of the works, have power to order in writing from time to time the removal from the works within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Bank's Engineer are not in accordance with the Specifications, the substitutions of proper materials, and the removal and proper re-execution of any work executed with materials or workmanship not in accordance with the drawings & specifications or instructions and the contractor shall forthwith carry out such order at his own cost. In case of default on the part of Contractor to carry out such order, the Employer shall have the power to employ any pay other persons to carry out the same; and all expenses consequent thereon, or incidental thereto, shall be borne by the Contractor, or may be deducted by the Employer from any money due, or that may become due, to the Contractor.

20. Defects after virtual completion : Any defect, shrinkage, settlement or other fault which may appear within the "Defects Liability Period" stated in the Appendix hereto, or, if none stated then within twelve months after the virtual completion of the works, arising in the opinion of the Employer from materials of workmanship not in accordance with the contract, shall upon the direction in writing of the Employer, and within such reasonable time as shall be specified therein, be amended and made good by the Contractor, at his own cost and in case of default the Employer may employ and pay other persons to amend and make good such defects, shrinkage settlements or other faults, and all damages loss and expenses consequent thereon are incidental thereto shall be made good and borne by the Employer or may be deducted by the Employer, upon the Bank's Engineer's Certificate in writing, from any money due or that may become due to the Contractor, or the Employer may in lieu of such amending and making good by the Contractor deduct from any money due to the Contractor a sum, to be determined

by the Employer equivalent to the cost of amending such work and in the event of the amount retained under clause 32 hereof being insufficient, recover the balance from the Contractor, together with any expenses the Employer may have incurred in connection therewith. Should any defective work have been done or materials supplied by any sub-contractor employed on the works who has been nominated as provided under clause 12 and 22 hereof, the contractor shall be liable to make good in the same manner as if such work or material had been done or supplied by the Contractor and been subject to the provision of this clause 2 hereof. The contractor shall remain liable under the provisions of this clause the signing of any certificate or the passing of any accounts by the Employer.

21. **Certificate of virtual completion and defects liability period:** The works shall not be considered as completed until the Bank's Engineer has certified in writing that they have been virtually completed. The defects liability period shall commence from the date of such certificates.

22. **Nominated Sub-Contractor:** All Specialists, Merchants, Tradesmen and others executing any work of supplying and fixing any goods for which the prime cost prices or provisional sums are included in the Schedule of Quantities and/or Specifications who may be nominated or selected by the Employer or hereby declared to be sub-contractors employed by the contractor and are herein referred to as nominated sub-contractors.

No nominated sub-contractors shall be employed on or in connection with the works against the Contractor shall make reasonable objection are (save where the Architect and the Contractor shall otherwise agree) who will not enter into contract providing.

- (a) That the nominated sub-contractor shall indemnify the contractor against the same obligation in respect of the sub-contract as the contractor is under in respect of this contract.
- (b) That the nominated sub-contractor shall indemnify the contractor against claims in respect of any negligence by the sub-contractors his servants or agents or any misuse by him or them or any scaffolding or other plant, the property of the Contractor or under any Workmen's Compensation Act in force.
- (c) Payment shall be made to the nominated sub-contractor within fourteen days of his receipt of the Employer's Certificate provided that before any Certificate is issued the Contractor shall upon request furnish to the Bank proof that all nominated sub-contractors accounts included in previous certificates have been duly discharged; in default whereof the Employer may pay the same upon a Certificate of the Bank and deduct the amount thereof from any sums due to the Contractor. The exercise of this power shall not create private of contract as between Employer and Sub-Contractor.

23. **Other persons employed by Employer:** The Employer reserves the right to use premises and any portion of the site for the execution of any work not included in this Contract which it may desire to have carried out by other persons, and the Contractor shall allow all reasonable facilities for the execution of such work but shall not be required to provide any plant or material for the execution of such work except by special arrangement with the Employer. Such work shall be carried out in such manner as not to impede the progress of the works included in the Contract and the Contractor shall not be responsible for any damage or delay which may happen to or occasioned by such work.

24. **Insurance in respect of damage to person and property:** The Contractor shall be responsible for all injury to persons, animals or things, and for all structural and decorative damage to property which may arise from the operation or neglect of himself or of any nominated sub-contractor or any employee of either, whether such injury or damage arises from carelessness accident or any other cause whatever in any connected with the carrying out of this Contract. This clause shall be held to include inter alia, any damage to buildings, whether immediately adjacent or otherwise, and any damage to road, streets, foot-paths, bridges or ways as well as damage caused to the buildings and works forming the subject of this contract by frost, rain, wind or other inclemency of weather. The Contractor shall indemnify the Employer and hold it harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of any legislature or otherwise and also in respect of any award or compensation or damages consequent upon such claim.

The Contractor shall reinstate all damage of every sort mentioned in this clause, so as to deliver up the whole of the Contract works complete to and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

An insurance policy covering third party liability shall be taken by the contractor to cover the loss/disablement of human life (persons not belonging to the contractor). This shall also cover the risk of damages to other's materials/equipment/properties including those, if any of the banks during construction/erection/commissioning of the said contract work at site. The value of third party liability for compensation for loss of human life or full /partial disablement shall be of required statutory value for full and partial disablement and shall nevertheless cover such compensation as may be awarded by a court of law. Cover for damage to other's equipment/property shall be as approved by the bank. The sub-contractors of the contractor shall not be holders or beneficiaries in the policy nor shall they be named in the policy. The bank shall be the principal holder of the policy along with the contractor. The bank reserves the exclusive right to assign the policy.

The Contractor shall indemnify the Employer against all claims which may be made against the Employer by any member of the public or other third party in respect of anything which may arise in respect of the works or in consequences thereof and shall

at his own expenses arrange to effect and maintain, until the virtual completion of the contract, with an approved office a policy of insurance in the joint names of the Employer and the Contractor against such risks and deposit such policy or policies with the Architect from time to time during the currency of this contract. The Contractor shall also similarly indemnify the Employer, against all claims which may be made upon the Employer whether under the Workmen's Compensation Act or any other status in force during the currency of this contract or at common law in respect of any employee of the Contractor or any Sub-Contractor and shall at his own expenses effect and maintain, in the joint names of the Employer and the Contractor against such risks and deposit such policy or policies with the Architect from time to time during currency of the Contract.

The Contractor shall be responsible for any liability which may be executed from the Insurance Policies above referred to and also for all other damage to any person, animal or property arising out of the incidental to the negligent or defective carrying out of this Contract transit, storage, erection, testing & commissioning policy. He shall also indemnify the Employer in respect of any costs, charges or expenses arising out of any claim or proceedings and also in respect of any award of compensation or damages arising therefrom.

The Employer shall be entitled to deduct the amount of any damage, compensation, costs, charges and expense arising of accruing from or in respect of any such claims or damage from any or all sums due or to become due to the Contractor without prejudice to the Employer's other rights in respect thereof.

25. **Date of commencement and completion:** The Contractor shall be allowed admittance to the site on "Date of Commencement" stated in the Appendix hereto, or each later date as may be specified by the Employer and be shall thereupon and forthwith begin the works and shall regularly proceed with and complete the same (except such painting or other decorative work as the bank may desire to delay) or before the "Date of Completion" stated in the Appendix subject nevertheless to provisions for extension of time hereinafter contained.
26. **Damages for non-completion:** If the Contractor fails to complete the works by the date stated in the Appendix or within any extended time under Clause 26 and 20 here the Contractor shall pay the Employer the sum named in the Appendix as " Liquidated Damages" for the period during which the said works shall so remain incomplete and the Employer may deduct such damages from any money due to the Contractor.
27. **Delay and extension of time:** If in the opinion of the Employer the works be delayed (a) by force major or (b) by reason of any exceptionally inclement weather or c) by reason of proceedings taken or threatened by or dispute with adjoining or neighboring owners or public authorities arising otherwise than through contractor's own default or (d) by the works or delays of other contractor or Tradesmen engaged or nominated by the Employer and not referred to in the schedule of quantities and/or specifications or (e) by reasons of Bank's Engineer instruction as per clause 17 hereof (f) by reason of civil

commotion, local combination of workmen or strike or lockout affecting any of the building trades or (g) in consequence of the Contractor not having received in due time necessary instructions from the Bank for which he shall have specifically applied in writing or (h) from other causes which the Bank may certify as beyond the control of contractor or (l) in the event, the value of the work exceed the value of the Priced Schedule of Quantities owing to variation, the Bank may make a fair and reasonable extension of time for completion shall as soon as may be given written notice thereof to the bank but the Contractor shall nevertheless constantly use his endeavors to prevent delay and shall do all that may reasonably has required to the satisfaction of Bank to proceed with work.

28. **Contractor's failure to comply with Employers instruction:** If the Contractor after receipt of written notice from the Employer requiring compliance within 10 days fails to comply with such further drawings and/or Bank's instructions the Employer may employ and pay other persons to execute any such work whatsoever that may be necessary to give effect thereto, and all costs incurred in connection therewith shall be recoverable from the Contractor by the Employer as a debt or may be deducted by him from any moneys due to the Contractor.

29. **Termination of Contract by the Employer:** If the Contractor being an individual or a firm commits any "act of insolvency" or shall be adjudged an insolvent or being an incorporated company shall have an order for compulsory winding up made against it or pass an effective resolution for winding up voluntarily or subject to the supervisions of the court and the Official Assignee or the Liquidator in such acts of insolvency or winding up, as the case may be, shall be unable within seven days after notice to him requiring him to do so to show the reasonable satisfaction of the Architect that he is able to carry out and fulfill the Contract and to given security therefore, if so required by the Architect.

Or if the Contractor (whether an individual, first or incorporated company shall suffer execution or other process of court attaching property to be issued against the Contractor.

Or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the Contractors.

Or shall assign to sublet this Contract without the consent in writing of the Employer first had and obtained.

Or shall charge or encumber this Contract or any payments due or which may become due to the Contractor hereunder.

(i) Has abandoned the Contract, or

(ii) Has failed to commence the works, or has without any lawful excuse under these conditions suspended the progresses of the works for fourteen days after receiving from the Bank notice to proceed or

- (iii) Has failed to proceed with the work with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or
- (iv) Has failed to remove materials from the site or to pull down and replace work for seven days receiving from the Bank written notice that the said materials or work were condemned and rejected by the Bank's Engineer under these conditions' or
- (v) Has neglected or failed persistently to observe and perform all of any of the acts, matter or things by the Contract to be observed and performed by the Contractor for seven days after written notice shall have been given to the Contractor requiring the Contractor to observe or perform the same.

Then and in any of the said cases the Employer may, notwithstanding any previous waiver, after giving seven days' notice in writing to the Contractor, determine the Contract, the whole of which shall continue in force as fully as if the Contract has not been so determined, and so if the works subsequently execute had been executed by or on behalf of the Contractor. And further, the Employer by his agents or servants may enter upon and taken possession of the works and all plant, tools scaffoldings, sheds, machinery, steam and other power utensils and materials lying upon the premises or the adjoining lands or roads, and use the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the work or by employing any other Contractor or other person or persons to complete the works, and the Contractor shall not in any way interrupt or do any act matter or thing to prevent or hinder such other contractor or other person or persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient the Bank shall give a notice in writing to the Contractor to remove his surplus materials and plant, and should the Contractor fail to do so within a period of fourteen days after receipt thereof by him, the Employer may sell the same by public auction, and give credit to the Contractor for the net amount realized. The employer shall thereafter ascertain and certify in writing under his hand what of the said plant and materials so taken possessions or by the Employer and the expenses or loss which the Employer shall have been put to in procuring the works to be completed and the amount. If any, owing the Contractor and the amount which shall be so certified shall thereupon be paid by the Employer to the Contractor or by the Contractor to the Employer, as the case may be, and the Certificate of the Bank shall be final and conclusive between the parties.

30. Termination of Contract by Contractor: If this payment of the amount payable by the Employer under Certificate of the Bank's Engineer shall be in arrears and unpaid for thirty days after notice in writing requiring payment of the amount as aforesaid shall have been given by the Contractor to the Employer, or if the Employer interferes with or obstructs the issue of any such Certificate, or if the Employer shall repudiate the Contract, or if the works be stopped for three months under the order of the Architect or the Employer or by any injunction or other order of any court of

to Law, then and in any of the said cases the Contractor shall be in liberty to determine the Contract by notice in writing to the Employer, and he shall be entitled to recover from the Employer, payment for all works executed and for any loss he may sustain upon any plant or materials supplied or purchased or prepared for the purpose or the Contract. In arriving at the amount of such payment the net rates contained in the Contractor's original e-Tender shall be followed or where the same may not apply valuation shall be made in accordance with Clause 17 hereof.

31. **Certificates and Payments:** The Contractor shall be paid by the Employer from time to time by installments under interim Certificate to be issued by the Bank's Engineer on account of the works executed work to the approximate value named in the Appendix as 'Value of work for Interim Certificate' has been executed in accordance with this Contract, subject, however, to a retention of the percentage of such value named in the Appendix as "Total Retention Money" after which time the installments shall be up to the full value of the work subsequently so executed and fixed in the building. And when the works have been virtually completed, the Contractor shall be paid by the Employer in accordance with the Certificate to be issued by the Bank's Engineers the sum of money named in the Appendix as "installment after Virtual Completion" being a part of the said Total Retention Money. And the Contractor shall be entitled to the payment of the Final Balance in accordance with the final Certificate at the expiration of the period referred to as 'the Defects liability Period' in the Appendix hereto from the date of virtual completion or as soon as after expiration of such period as the works shall have been finally completed and all defects made good according to the true intent and meaning hereof whichever shall last happen provided always or at or after their completion shall not relive the Contractor from his liability under clause 21 and 36 nor relieve the Contractor of his inability in cases of fraud, dishonesty, or fraudulent concealment relating to the works or materials or to any matter dealt with in the Certificate and in case of the all defects and insufficiencies in the works or materials which a reasonable examination would not have disclosed.

The Employer shall have power to withhold any Certificate if the works or any parts thereof are not being carried out to his satisfaction.

32. **Delayed Payment:** Any amounts payable by the Employer to the Contractor shall, if not paid within the 'period of honoring Certificates' names in the Appendix carry interest at the rate named in the Appendix as the "Rate of interest for delayed payment" from the date upon which sum ought to have been paid by the Employer until the payment.
33. The decision, opinion, direction Certificate (except for payment) with respect to all or any of the matters under Clauses 2(a, b), 4, 5, 14, 20 (a, b, c, d and f) hereof (which matters are herein referred to as the excepted matters) shall be final and conclusive and binding on the parties hereto and shall be without appeal. Any other decision, opinion, direction, shall be subject to the right of Arbitration and review

under the Clause 35 hereof in the same way in all respects (including the provisions as to opening the reference).

34. **Settlement of disputes by Arbitration:** All disputes and differences of any kind whatever arising out of or in connection with the contract or the carrying out of the works (whether during the progress of the works or after the completion and whether before or after the determination abandonment or breach of the contract) shall be referred to and settled by the Bank who shall state its decision in writing. Such decision may be in the form of a final certificate or otherwise. The decision of the Bank with respect to any of the excepted matters shall be final and without appeal as stated in Clause 33 hereof. But if either the Contractor be dissatisfied on any matter on which a decision is taken by the Bank as above, except any of the expected matter the Contractor may within 25 days after receiving notice of such decision give a written notice to the other party requiring that the matters in dispute be arbitrated upon. Such written notice shall specify the matters, which are in dispute or difference of which such written notice has been given. If both the parties agree, a single arbitrator would be appointed for the purpose. In case no agreement could be reached on the appointment of single arbitrator, both the parties will nominate one person each as an arbitrator on their behalf. The two arbitrators nominated by the parties shall nominate one more person to act as third arbitrator or umpire.

The arbitrator or Arbitrators, as the case may be, shall have power to open up, review and revise any certificate, opinion, decision, requisition or notice, save in regard to the excepted matters, referred to in the preceding clause, and to determine all matters to dispute which shall be submitted to arbitration and of which notice shall have been given as aforesaid.

The arbitrator or Arbitrators, as the case may be, shall make his or their award within one year (or such further extended time as may be decided by him or them as the case may be with the consent of the parties) from the date of entering on the reference. In case during the arbitration proceedings the parties mutually settle or compromise their dispute or difference, on the parties filing their joint memorandum of the settlement or compromise, the Arbitrator or the Arbitrators as the case may be, shall make an award in terms of such settlement or compromise.

Upon any such reference, the decision on the cost incidental to the reference and Award respectively shall be in the discretion of the arbitrator or Arbitrators as the case may be, who may determine the amount thereof or direct the same to be taxed as between the party and party, and shall direct by whom and to whom and in what manner the same shall be borne and paid.

This submission shall be deemed to be a submission to arbitration within the meaning of the Indian Arbitration and Conciliation Act, 1996 or any statutory modification thereof.

The award of the arbitrator or Arbitrators, as the case may be, shall be final and binding on the parties. It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or dispute being referred to arbitration, but shall proceed with the works with all due diligence and shall until the decision of the Arbitrator or Arbitrators, as the case may be, is given, abide by the decision of the Bank. No award of the Arbitrator or Arbitrators, as the case may be, shall relieve the Contractor of his obligations to adhere strictly to the Bank's instructions with regard to the actual carrying out of the works. The Employer and the Contractor hereby also agree that arbitration under this Clause shall be a condition precedent to any right of action under the Contract.

35. Right of technical scrutiny of final bill

The Employer shall have a right to cause a technical examination of the works and the final bill of the contractor including all supporting vouchers, abstracts, etc. to be made at the time of payment of the final bill. If as a result of this examination of otherwise any sum is found to have been overpaid or over certified it shall be lawful for the employer to recover the sum.

36. Employer entitled to cover compensation paid to workman

If, for any reason, the Employer is obliged, by virtue of the provisions of the Workmen's Compensation Act, 1923, or any statutory modification or re-enactment thereof to pay compensation to a workman employed by the Contractor in execution of the works, the Employer shall be entitled to recover from the Contractor the amount of compensation so paid, and without prejudice to the rights of the Employer under the said Act. The Employer shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by the Employer shall not be bound to contest any claim made against it under the said Act, except on the written request of the Contractor and upon his giving to the Employer full security to the satisfaction of the Employer for all costs for which the Employer might become liable in consequence of contesting such claim

37. Abandonment of works

If at any time after the acceptance of the e-Tender, the Employer shall for any reasons whatsoever not requires the whole or any part of the works to be carried out, the Bank shall give notice in writing to the Contractor who shall have no claim to any payment of compensation or other-wise whatsoever on account of any profit or advantage which he might have derived from the execution of the whole works.

38. Return of surplus materials

Notwithstanding anything to the contrary contained in any or all the clauses of this Contract, where any material for the execution of the Contract is procured with the assistance of the Employer by purchase made under orders or permits or licenses issued by Government, the Contractor shall hold the said materials economically and solely for the purpose of the Contract and not dispose of them without the prior

written permission of the Employer and return it to the Employer, if required by the Employer, at the price to be determined by the Bank having due regard to the conditions of the materials, the price to be determined not be exceed the purchase price thereof inclusive of sales tax, octroi and other such levies paid by the Contractor in respect thereof, in the even of breach of the aforesaid condition, the Contractor shall in addition to being liable to action for contravention of the terms of licenses or permit and/or criminal breach of trust, be liable to Employer for all moneys, advantages or profits resulting or which in the usual course would have resulted to his by reason of such breach.

39. Right of employer to terminate contract in the event of death of Contractor or individual

Without prejudice to any of the rights or remedies under this Contract, if the Contractor, being an individual, dies, the Employer shall have the option of terminating the contract without incurring any liability for such termination.

40. NON-DISCLOSURE CLAUSE

The contractor shall not disclose directly or indirectly any information, materials and of the Bank's infrastructure/ system/equipment's etc. which may come to the profession or knowledge of the contractor during the course of discharging its contractual obligations in connection with the agreement, to any third party and shall at all times hold the same in strictest confidence. The contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The contractor shall not publish, permit to be publish, or disclose ant particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The contractor shall indemnify the Employer for any loss suffered by the Employer as a result of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the contractor and the Employer shall be entitled to claim damages and pursue legal remedies.

The contractor shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under this agreement are fully satisfied.

The contractor's obligations with respect to non-disclosure and confidentiality will survive the expiry or termination of this agreement for whatever reason.

41. Sexual Harassment

(a) The Contractor / Agency shall be solely responsible for full compliance with the provisions of "the Sexual Harassment of women at work place (Prevention, Prohibition and Redressal) Act, 2013" in case of any complaint of sexual harassment against its employee within the premises of the Bank, the complaint will be filed before the Internal Complaints Committee constituted by the Contractor / Agency and the Contractor/Agency shall ensure appropriate action under the said Act in respect to the complaint.

(b) Any complaint of sexual harassment from any aggrieved employee of the

Contractor against any employee of the Bank shall be taken cognizance of by the Regional Complaints Committee constituted by the Bank.

(c) The contractor shall be responsible for any monetary compensation that may need to be paid in case the incident involves the employees of the contractor, for instance any monetary relief to Bank's employee, if sexual violence by the employee of the contractor is proved.

(d) The contractor shall be responsible for educating its employees about prevention of sexual harassment at work place and related issues.

(e) The contractor shall provide a complete and updated list of its employees who are deployed within the Bank's premises.

43 Force Majeure:

If either party is unable to perform its obligations under this Agreement due to the occurrence of an event beyond its control (such as acts of God, war like situations, riots, labor strike, government actions, earthquakes, cyclones, typhoons, and other natural calamities, etc.), that party will not be deemed to have defaulted under this Agreement. Each party agrees to use all reasonable efforts to enable performance under this Agreement to continue. If the period of non-performance due to a force majeure event exceeds 30 days, the party whose ability to perform has not been so affected may, by giving written notice, terminate this Agreement

44. Compliance with the Rule 144(xi) of GFR 2017 inserted vide Office Memorandum (OM) F. No. 6/18/2019-PPD dated July 23, 2020 issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India, the Public Procurement Orders issued in furtherance thereto, and their subsequent revisions shall be mandatory. In this regard, Bidder shall submit a copy of Undertaking / Declaration / Certificate on their letter head duly sealed and signed by the authorized signatory in the format given at Annexure E.

If the Undertaking / Declaration / Certificate submitted by the bidder is found to be false, his/her/its tender / work order will be immediately terminated, and legal action in accordance with law including forfeiting of Earnest Money Deposit / Performance Bank Guarantee / Security Deposit may be initiated and the Bank may also debar the bidder from participating in the tenders invited by the Bank in future.

Place:

Date:

Signature of the Tenderer with Seal.

The condition Herein before Referred To

1.	Defects Liability Period	One year from the date of Virtual Completion Certificate
2.	Period of Final Measurement	90 days
3.	Date of Commencement	14 th day from the date of letter of acceptance.
4.	Date of Completion	Date of virtual completion certificate.
5.	Rate of liquidated damages for non-completion of work.	0.25% of contract amount per week of delay subject to a maximum of 10% of the contract value.
6.	Value of works for interim certificates	60% of the contract value
7.	Period for honouring certificates	One month for interim bills and 3 months for final bill.
8.	Interest for delayed payment	3% per annum

Place:

Seal & signature of Contractor

Date:

SECTION-VI
Commercial Check List

Design, Supply, Installation, Testing and Commissioning of Grid connected, rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in Kanpur

Sr. No.	Description	Bank's Terms and conditions	Acceptance of Bank's terms and conditions (YES/NO)
1	Validity	90 days from opening of e-Tender part-I	
2	EMD	Rs1,61,400/-	
3	Terms of payment	As per Section 3.13	
4	Performance Bank Guarantee	As per Section 3.12	
5	Guarantee Period / Defect Liability Period	One year from date of virtual completion.	
6	Service after sales during CAMC	Quoted rates shall include the cost of repairs/maintenance including replacement of any material / assembly / equipment / spares / labour if found necessary and bi-monthly visit.	
7	Completion period	90 days from 14th day of letter of award of work.	
8	Liquidated damages	0.25% per week of delay subject to a maximum of 10% of the contract value.	
9	Penalty during warranty & AMC period	Rs.500/- per day subject to maximum of 50% of the annual maintenance charges, if the defect in the system is not rectified within the period of 02 days	

Sr. No.	Description	Bank's Terms and conditions	Acceptance of Bank's terms and conditions (YES/NO)
10	Penalty for reduced Power Generation during	As per applicable clause in Part I of the e-Tender	

Part II should not contain any terms and conditions but only priced for bill of quantity. Terms and conditions, if any, incorporated in Part II, will not be valid or considered.

Place

Date

Seal & Signature of Contractor

Schedule of Commercial Deviations

We confirm that all commercial terms and conditions of the Bank except for deviations listed below are acceptable to us.

Sr. No.	Section No.	Clause No.	Deviation proposed
1	2	3	4

Seal & Signature of Tenderer

Name:

Designation :

Date :

Schedule of Technical Deviations

We confirm that all technical terms and conditions and specifications of the Bank except for deviations listed below are acceptable to us.

Sr. No.	Section No.	Clause No.	Deviation proposed
1	2	3	4

Seal & Signature of Tenderer.

Name

Designation

Date

Section - VII
Technical Specifications

Scope of Work

A.) The extent of the work shown and specified hereunder is defined to include all labour, materials, equipment, supervision, net metering/Net feeding provisions and liaisoning with KESCO as required for the design, fabrication, supply, installation, testing and commissioning of the complete solar power generation system, and subsequent upkeep and maintenance as defined.

Following capacity solar plants are required to be installed-

	Plant details	Annual guaranteed generation per annum	Net metering/Net feeding provision
i)	40 KWp for Main office building, RBI Kanpur	54000 KWH	Net feeding meter is to be provided for 1000 KVA sanctioned load in liaisoning with KESCO
ii)	30 KWp for additional office building in Bank's premises, RBI Kanpur	40500 KWH	
iii)	15 KWp on D block of RBI officers' colony Civil Lines, Kanpur	20250 KWH	Net meter of 22 KVA is already provided
iv)	15 KWp on D block of RBI officers' colony Tilak Nagar, Kanpur	20250 KWH	Net meter of 20 KVA is already provided
v)	25 KWp on J and K block of RBI staff colony Kidwai Nagar, Kanpur	33750 KWH	Net meter of 27 KVA needs to be installed in liaisoning with KESCO

The system shall be connected to main power supply having no DG back up. Generation of Solar Energy based, conversion of the same to AC power with a **guaranteed annual generation specified for each plant** per year during the first five years of operation at Bank's power grid synchronization point including:

- a) Design, Manufacturing, Factory Acceptance Test (FAT), supply, installation, testing and commissioning of Solar PV Modules (inclusive of Electrical, Electronic and Mechanical features), Power Conditioning Units (PCUs), as required and

specified and Generation monitoring units to be installed at proper location for monitoring.

- b) Supply and installation of Module mounting structure / super structure on identified locations. The successful Tenderer shall design their SPV Panel structure with Hot dipped galvanised steel and cement concrete (CC) foundation suitable for site condition.
- c) Supply, installation, testing and commissioning of three phase Power Conditioning Units (PCU),(inverter plus local grid synchronizing system), distribution panels, electrical switchgears, inverters, metering and connecting the system to the switch gear(MCB/Distribution Board) provided by the Bank for load and connecting up the system to the electrical grid, surge protection units etc. as required.
- d) Supply and laying of all power and control cables, as per site requirement, on prefabricated GI cable trays including supply of cable trays, their installation, hangers, supports, cable terminations and all fixing accessories.
- e) **Earthing:** Supply and installation of **three sets of compounding / chemical earthing using copper coated earth electrode minimum dia 80mm and length approx. 3.0 meter at least at a depth of 10 feet including earthing chamber with GI cover plate (IS: 3043/1966 amended till date) and supply and laying of earth strip with 25x6 mm GI strip laid upto lightning arrestors, body earth and neutral earth as per requirements and as directed by Bank's Engineer** on wall/ceiling/existing trench/ road cutting etc. with necessary spares & saddles at suitable interval and from earthing station to the entire system including interconnection of solar panels. Bidders may visit the site to identify the quantity of earth strips to be used for the work. No measurement will be made for the earth strips. Earthing stations shall be provided with testing point for every pits as per relevant IS, including cutting of roads / paved areas & making good the damages as in original shape.
- f) Testing and commissioning of the entire system including synchronizing with power grid and operation as required. The installation shall include the electrical switchgears, cabling, terminations, cable trays, inverters, metering and connecting the system to the electrical grid.
- g) The PV modules shall be installed with the necessary tilt with the most effective orientation.
- h) All related & required civil works will be the responsibility of successful Tenderer.

- i) **Replacement of existing conventional energy meter provided by local electricity supply agency / authority with bidirectional energy meter for Net feeding/Net metering as per UP state electricity rules and grid connection** etc. This will also include the replacement of CT/PT, metering Box installation and commissioning of net meter etc., if required, in the scope of the bidder. The scope shall also include the required liaison with local electricity authority / Supply Company and / or with any other applicable authority for the same. **The bidder will pay the fees / charges, if any, to the power supply authority or any other authority as applicable for providing Net Metering/Net feeding for this work and the Bank will reimburse the said fees / charges on production of original receipts of such payment.**
- j) The bidder must take approval/NOC from the concerned local supply authority/any other statutory authority (KESCO /LESA/UPPCL) as applicable for above cited grid tied solar plant towards connectivity required if any. and submit the same to the Bank before commissioning of SPV plant.
- k) Supply and installation of lightening arrestors as conform to IE standards
- l) Solar System capacity shall be demonstrated to the Bank's Engineer.
- m) Onsite training to RBI Engineers and Workmen for proper operation, maintenance and trouble shooting.
- n) Provision for periodic cleaning of the solar panels considering the ambient conditions of the site. Water connection at the same floor at one point shall be provided by Bank.

B.) All Inclusive Upkeep & Maintenance during Defect Liability and Comprehensive Annual Maintenance Contract (CAMC) period

During the Defect Liability period and CAMC period the contractor shall provide the all Inclusive Upkeep & Maintenance services of the entire system as provided, including all spares and consumables. The system shall be maintained by the contractor for a period of minimum 10 years from the date of handing over i.e. 09 years of CAMC after successful completion of one year of defect liability period of the system. The rates of the same are to be quoted separately as per Schedule of Quantities.

In addition to the routine / periodic cleaning of the Panels, qualified engineer of the contractor shall pay visit to the site **at least once a quarter** to check the system thorough and conduct preventive maintenance.

The bidder shall ensure providing and maintaining of remote monitoring of the plants by providing necessary GSM module and any other device if required throughout their contract period . The system shall not be connected to Bank's LAN system and vendor needs to make suitable by their own for remote monitoring.

Service to be provided by the Bank:

Unless otherwise agreed by RBI, only the following services shall be provided in connection with this work:

- a) Single point water source for cleaning of SPV panels near to the solar system. Further plumbing for distribution of water to various array locations, if required, to be provided by the contractor.
- b) Provision of necessary switchgear in the LT distribution panel for connecting the solar energy based AC power to Bank's Power grid. However, the termination of cable to the switchgear shall be in the scope of the successful Tenderer.
- c) **Dedicated bus bar of suitable size with non DG supply to the point at a distance of approximately 10-15 mtrs from proposed location of ACDB for connecting the solar plant to power supply grid**

7.1 MINIMAL TECHNICAL REQUIREMENTS / STANDARDS FOR SPV ITEMS / SYSTEMS

7.1.1 PV MODULES:

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

Crystalline Silicon Terrestrial PV Modules: IEC 61215 / IS14286

In addition, the modules must conform to IEC 61730 Part 1- requirements for construction & Part 2 - requirements for testing, for safety qualification or Equivalent IS

PV modules shall be suitable to be used in a highly corrosive atmosphere (coastal areas, etc.) must qualify Salt Mist Corrosion Testing as per IEC 61701 / IS 61701.

7.2 RELEVANT STANDARD OF SYSTEM / COMPONENTS / ITEMS

7.2.1 The system/ components/ items of the SPV power systems/ systems deployed must conform to the latest edition of IEC/ Equivalent BIS Standards/ MNRE specifications / as specified below:

System / components / items	Applicable BIS /Equivalent IEC Standard Or MNRE Specifications	
	Standard Description	Standard Number
Charge Controller / Maximum peak power transfer (MPPT) units	Environmental Testing	IEC60068-2 (1,2,14,30) / Equivalent BIS Std.
Power Conditioners/ Inverters including (Maximum peak power transfer) MPPT and Protections	Efficiency Measurements	IEC 61683 / IS 61683
	Environmental Testing	IEC 60068-2 (1, 2, 14, 30) / Equivalent BIS Std.
	procedure of islanding prevention measures	IEC 62116
Cables	General Test and Measuring Method PVC insulated cables for working voltage up to and including 1100 V and UV resistant for outdoor installation	IEC 60227 / IS 694 IEC 60502 / IS 1554 (Pt. I & II)
Switches/Circuit Breakers / Connectors	General Requirements connectors –safety A.C. / D.C.	IEC 60947 part I,II, III / IS 60947 Part I,II,III EN 50521
Junction Boxes /Enclosures for Inverters/Charge Controllers/Luminaries	General Requirements	IP 65(for outdoor)/ IP 21(for indoor) as per IEC 529

7.3. AUTHORISED TESTING LABORATORIES / CENTERS

7.3.1 The PV modules must be tested and approved by one of the IEC 62093 authorized test centres. Test certificates can be issued by any of the NABL / BIS Accredited Testing / Calibration Laboratories/ international Electrical Safety Standards wherever applicable.

7.3.2 Test certificates for the system/ components/ items from any of the NABL / BIS Accredited Testing Calibration Laboratories / MNRE approved test centres to be submitted to the Bank.

7.4. IDENTIFICATION AND TRACEABILITY

Each PV module used in the solar power project should have unique identification numbers given by the manufacturer. The unique identification number can be inside or outside the module Laminate, but must be able to withstand harsh environmental conditions.

- i) Name of the manufacturer of PV Module
- ii) Name of the Manufacturer of Solar cells of PV Module
- iii) Month and year of the manufacture (separately for solar cells and module).
- iv) Country of origin (separately for solar cells and module)
- v) I-V curve for the module
- vi) Peak Wattage, I_m , V_m and field factor (FF) for the module
- vii) Unique Serial No. and Model No. of the module
- viii) Date and year of obtaining IEC PV module qualification certificate
- ix) Name of the test lab issuing IEC certificate
- x) Other relevant information on traceability of solar cells and module as per ISO 9000 series.

7.5 Monitoring System

The contractor should provide Remote Monitoring System. However, it should be SIM Card/LAN based monitoring system must record/ capture all data regarding energy generation of solar power plant and same shall be maintained by the bidder throughout its contract period. Its remote access shall also be provided to Bank's engineer .

7.6 The contractor shall execute the whole & every part of the work in the most substantial manner and both as regard to materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also confirm the execution of work exactly, fully and faithfully to designs, drawings & instructions in writing in respect of the work assigned by the Bank's Engineer

7.7 ACTIONS TO BE TAKEN BY THE SUCCESSFUL TENDERER AFTER AWARD OF WORK

7.7.1 Considering that time is the essence of the contract, the successful tenderer shall take the following actions immediately –

- a) They shall contact the Bank's Engineer in charge of the work, immediately after award of work and submit the agreement on non-judicial stamp paper of adequate value as per the relevant stamp act and the cost of the same shall be completely borne by the tenderer.
- b) All the required submittals must preferably be completed within 14 days from the date of issue of work order.
- c) A **programme chart** shall be prepared for execution of the work within specified time and submitted to the Bank. The work-schedule chart/ bar-chart shall also include the time schedule for commencement of various activities of work like inspection & delivery of materials, commencement of work, completion of work etc. required for the execution & timely completion of work.

7.7.2 All activities for execution of work shall strictly follow the programme chart so finalized unless advised otherwise by the Bank's Engineer in writing. It shall be the responsibility of the contractor to adhere to this work-schedule and complete the work in the specified time. Any deviation from this schedule, for any reason, shall be brought to the notice of the Bank's Engineer immediately to enable him to take necessary corrective action(s). Failure to submit the work schedule chart within the specified time or meeting the various committed deadlines shall be treated as delay on the part of the tenderer

7.7.3. **Drawings, indicating the design of Solar Power Generation System** proposed along with designs for structures / foundations for SPV array shall be submitted to the Bank's Engineer, for approval, **within 15 days of the receipt of detailed order**. The drawings shall indicate all relevant details about the component/equipment etc. A three dimensional pictorial view of the same shall also be depicted in the drawings. The contractor shall submit all equipment information, which should include but not limited to the following and obtain approval:

- a) General arrangement and dimensional layout
- b) Schematic Drawing showing the requirement of SPV System, Power conditioning Unit(s), Circuit breakers, Junction Boxes, AC and DC Distribution Boards, meters etc.
- c) Structural drawing along with foundation details for the structure.
- d) Itemised bill of material for complete SPV system covering all the components and associated accessories.

7.8 Testing of equipment/system:

7.8.1 Type test certificates for all the tests specified for the factory built Solar PV modules and the component parts shall be submitted by the Bidder along with the bid.

7.8.2 Factory Acceptance Test (FAT) of equipment: Delivery of equipment is to be made to the site in accordance with the programme finalized in consultation with Bank's Engineer. **The equipment shall be delivered only after pre-delivery inspection has been carried out by RBI's authorized representative. Pre-delivery inspection of equipment shall be carried at the factory premises of L1 bidder.** The Bank shall be informed of such inspection at least 07 days in advance.

7.8.3 Testing at site after completion of installation:

On completion of the installation, the Tenderer shall conduct a system acceptance test. The Tenderer shall propose a detail system acceptance test plan, which shall be jointly reviewed by RBI and the Tenderer.

- a) All units shall on their completion, be subjected to a performance test followed by an acceptance inspection and tests to determine that all parts of the installation confirm to the requirement and that all equipment's function as required and the work has been carried out as specified.
- b) Tests and inspections shall be made by the contractor in the presence of the Bank's Engineer. Contractor shall notify the Bank's Engineer in writing before the date of testing in order to facilitate arrangements for Bank's Engineer to be present.
- c) The contractor shall submit proposed testing procedure to the Bank's Engineer before the date of testing.
- d) All test instruments and personnel to carry out the testing and commissioning shall be provided by the contractor. Adequate supervision of the tests shall also be maintained.
- e) Corrective measures, if necessary, shall be carried out at no cost to the Bank.
- f) Performance Test at Site: After installation of the complete system, its operating capability shall be demonstrated. The contractor shall provide personnel, tools, etc. for testing. The performance test shall be conducted in the presence of Bank's Engineer or his authorized representative for a minimum of **(24) twenty-four hours for ten working days** as per the following: -
 - i. Measurement of peak DC & AC power generated shall be taken every day for 7 working days at available load condition.
 - ii. Auto operation of the complete system

Correction of unsatisfactory operation during test period, if any deficiencies or variations in the design, fabrication or operation causing unsatisfactory performance is noticed, then same shall be corrected to provide satisfactory performance. Manufacturer/Contractor shall have appropriate service personnel at site during the test period to service or adjust the systems equipment as required.

7.8.4 Acceptance of system: After completion of the system performance tests a joint acceptance inspection shall be carried out by Bank's Engineer and the representative of the contractor. The purpose of this inspection shall be to determine that the system has been furnished and installed as specified. If the system is not acceptable for reasons of non-compliance to the drawings and specifications, the contractor shall make immediate corrections within the construction schedule. A final acceptance inspection shall be done to determine all corrections have been made.

7.8.4.1 WARRANTY

PV modules used in solar power plants/ systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

7.9 TRAINING

The contractor shall include in his e-Tender cost of training of Bank's technical staff. Initial training of operating and maintenance personnel shall be provided at site to ensure competence in the operation and maintenance of the system provided. The training programme shall include but not limited to the following elements:

A) OPERATING TRAINING

- (i) System description including electrical, electronic and mechanical sub-system and their functions.
- ii) System operating procedures.
- iii) System operating characteristics.
- iv) System limitations.
- v) On-site system operation.

B) MAINTENANCE TRAINING

- i) System description including electrical, electronic and mechanical sub-systems and their functions.
- ii) System and component trouble-shooting

- iii) On-site inspection, operation and maintenance
- iv) Schedule of maintenance, safety checks and procedures.

7.10 DETAILED SPECIFICATIONS

Solar PV system shall consist required number of PV modules, module mounting structures, MPPT/PCU with data logger, Junction box and distribution boards, cables and hardware, earthing, surge arrestors, tool kit, related civil works, and control & monitoring system etc. The specifications of these items are as under:

7.10.1 Solar PV Modules:

- a) The **solar photo-voltaic module of ≥ 500 Wp power** output under STC to be provided with high efficiency of more than 15% multi or mono crystalline silicon solar cells.
- b) The solar cell shall have surface anti-reflective coating to help to absorb more light in all weather conditions.
- c) It should have rugged design to withstand tough environmental conditions and high wind speeds (over 150 km/h). It shall perform satisfactorily in relative humidity up to 95% and temperature between 10 deg. C and 55 deg. C.
- d) PV modules must be designed for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.
- e) The PV module should be IEC 61215-Ed 2 & 61730-1&2 / UL certified and with MNRE (GOI)-SEC test certificate or from other accredited / approved labs. The offered make and model of solar PV module should feature in the latest ALMM list issued by MNRE. The I-V characteristics of all suitable modules as per specifications, to be used in the systems are required to be submitted at the time of supply.

7.10.2 Module Mounting Structures:

- f) The module mounting structure to be designed in such a way that it will occupy minimum space without sacrificing the output from suitable number of solar modules in series.
- g) The structure shall be designed to allow easy replacement of any module & shall be in line with the site requirements.
- h) The frames and leg assemblies of the mounting structure should be of standard M.S. sections of angle, channel, tubes and any other sections conforming to IS: 2062. These structures should be hot dip galvanized for the long life in external weather conditions.

- i) The mounting structure should be of Fixed Type, Tilt angle suitable to site, Foundation PCC as directed by Bank's Engineer, Fixing type with SS 304 fastener with clamp fitted to provide rigidity to the structure.
- j) Galvanized Steel Structural must be considered for all type structural steel proposed for the power system.
- g) The array structure shall be grounded properly using earthing kit.
- h) Design drawings with material selected shall be submitted for prior approval of Bank.

7.10.3 PCU / MPPT/INVERTER:

- a) PCU / MPPT and 3 phase with neutral inverter shall be supplied as integrated unit depending upon the size of the solar power system. It should conform to IEC61683 and must additionally conform to the relevant national/ international Electrical Safety Standards IEC60068-2. To minimize power losses the PCU should be microprocessor& micro controller based having inverter, which converts DC energy produced by the solar array to 3 phase with neutral AC energy.
- b) The PCU shall be mounted either on a suitable MS stand on the floor or on the wall with proper supports in the control room. All cable entry to and from the PCU shall be fully sheathed to prevent access of rodents, termites or other insects into the PCU from bottom/top of the PCU.
- c) PCU to be communicable on LAN protocol/mobile application based remote monitoring system (data logger) and should be provided with the following minimum Indications (through LEDs & LCD display)
 - Inverter ON
 - Grid ON
 - Inverter under voltage/over voltage
 - Inverter over load
 - Inverter over temperature.

Protections:

- Over voltage both at input & output
- Over current both at input & output
- Over/under Grid frequency
- Over temperature
- Short circuit
- Protection against lightening
- Surge voltage induced at output due to external source.

- d) The inverter shall be designed for continuous, reliable power supply as per specifications. The inverter shall have high conversion efficiency from 25 percent load to the full rated load. Output Sine wave with less than 3% THD from no load to full load at 0.8 pf lag or lead. The efficiency of the inverter shall be more than 94% at full load and more than 80% at partial load (50%-75%). The supplier shall specify the conversion efficiency in the offer.
- e) The inverter should be capable of operating under ambient temperature 0- 55 deg C, Humidity 0-95% RH
- f) The inverter shall have internal protection arrangement against any sustained fault in the feeder. The inverter shall have provision for input & output isolation.
- g) Inverter shall be tested for islanding protection performance and should be provided. When the mains power is off, the PCU should also get automatically off so that back-feeding to the grid is not possible.
- h) The software for remote monitoring through LAN/mobile application and hardware required for interfacing the system are to be supplied.
- i) Maximum Power Point Tracker (MPPT) shall be integrated into the PCU to maximize energy drawn from the Solar PV array. The details of working mechanism of MPPT shall be furnished. Each solid-state electronic device shall have to be protected to ensure long life of the inverter as well as smooth functioning of the inverter.
- j) The dimension, weight, foundation, makes details etc. of the PCU / Inverter shall be clearly indicated in the detailed technical document. Good quality & reputed proven makes having minimum two years of trouble free successful functioning in similar solar PV system should be supplied.
- k) The PCU shall be capable of complete automatic operation, including wake-up, synchronization & shut down
- l) Built-in with data logging to remotely monitor system performance through external PC shall be provided (PC shall be provided by Bank)

7.10.4 Junction box and distribution boards:

- a) The junction boxes should be dust, vermin & waterproof & made of FRP/ABS plastic for outdoor use and IP 65 rated (for outdoor) / IP 21 (for indoor) and IEC 62208, for long-term use in PV systems. In addition, the direct connection between the strings and the spring clamp connectors should ensure a durable and safe installation.
- b) The junction boxes shall have suitable cable entry points fitted with cable glands of appropriate sizes for both incoming & outgoing cables. Suitable markings shall be

provided on the bus bar for easy identification & cable ferrules shall be fitted at the cable termination points for identification.

7.10.5 Cables and hardware:

- a) Flexible cables of appropriate size and voltage rating of 660/1000V to be used in the system and shall conform to IS 694/1554 standards. The cable should have excellent resistance to heat, cold, water, oil, abrasion, UV radiation.
- b) Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter, inverter / AC DB to location of propose for grid interaction (approx. Length 100 mtrs) 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.
- c) Cable Routing/ Marking: All cable/wires are to be routed in heavy duty PVC conduit of suitable diameter and suitably tagged/saddled and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- d) As per site requirement Cable laying through underground / across the road by providing necessary GI pipe is within the **scope of work of the Tenderer**.
- e) The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25 years.

7.10.6 General Technical Specifications:-

- 1. Data Logging Provision for plant control and monitoring shall provide time and date stamped system data logs for analysis purposes.
- 2. Metering and Instrumentation for display of systems parameters and status indication to be provided.

PV array energy production: Digital Energy Meters (Built-in in the inverter or Sperate) the to log the actual value of AC/ DC voltage, Current & Energy generated (each day / cumulatively) by the PV system shall be provided.

All major parameters available on the digital bus and logging facility for energy auditing shall be available on the PC display.

The following parameters should be accessible via the operating interface display.

- a. AC Voltage.
- b. AC Output current.
- c. Output Power
- d. DC Input Voltage.

- e. DC Input Current.
- f. Time Active
- g. Time disabled.
- h. Time Idle
- i. Inverter Status.

7.11.1 System protections requirements: Protective function limits (Viz.-AC Over voltage, AC Under voltage, over frequency, under frequency, ground fault, PV starting voltage, PV stopping voltage, over voltage delay, under voltage delay, Ground fault delay, PV starting delay, and PV stopping delay).

7.11.2 In addition to above, the system shall be provided with the following:

- a) **Earthing:** The structure of the PV arrays will be grounded properly using adequate number of earthing. All metal casing / shielding of the system shall be thoroughly grounded to ensure safety of the solar systems.
- b) **Lightning and O/V protection:** The SPV systems shall be provided with lightning & over voltage 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.
- c) All wiring/cables should be in proper conduit or suitable casing and wires should not be hanging loose.
- d) All connections are to be made through suitable cable/lug/terminals; crimped properly & with use of Cable Glands.
- e) Switches / Circuit Breakers / Connectors-safety IS/ IEC 60947 part I, II & III, EN 50521
- f) Fuses to be provided to protect against short circuit conditions.
- g) Details of solar power system design and layout for all systems shall be submitted along with Technical bid (Part-I)
- h) All the components of the systems viz. PV modules, Electronics, etc. should have type approval / test certificates **as per MNRE guide lines**

- i) All components and materials used in the system should be of good quality & conform to the BIS / IEC standards / specifications, wherever available / applicable.
- j) Each system should have number plate with name & logo of the manufacturer and the month / year of installation.
- k) Operation and Maintenance / Instruction Manual (with Do's and Don'ts) to be provided with each system.
- l) Danger boards should be provided as and where necessary as per IE Act./IE rules as amended up to date.

7.11.3 ENVIRONMENT/MAINTENANCE/ SAFETY DESIGN PARAMETERS

i) Environment

All components and materials are to be designed and selected for long service life under local environment conditions.

ii) Maintenance consideration

- a) Particular attention shall be given to keep components simple, rugged and easily accessible for routine maintenance and components replacement.
- b) Major assemblies and components such as, electrical components/controls shall be interchangeable and easily removable/replaceable without extensive dismantling of other assemblies of components.
- c) **All wiring shall be of a uniform colour coding and marking system throughout indicating wiring terminations** to permit rapid effective tracing and trouble shooting. Maintenance manual shall reflect said colour coding/markings.
- d) To facilitate identification, each item of equipment shall have a name plate of corrosion resistant metal attached in a conspicuous location.

iii) Safety considerations

All components shall be designed to have fail proof performance. In the event of an equipment failure or external influence such as improper operation, power failure or other adverse conditions affecting the proper function of the system or equipment, the said system or equipment **shall revert to a safe state**.

Place:

Date:

seal & signature of the Tenderer

A. SCHEDULE OF TECHNICAL INFORMATION

i)	Enclose a write up on the system design proposed for this project specifically indicating how the power generated from the solar energy will be synchronized with the local grid.	
ii)	Enclose a single line diagram (SLD) / schematic layout for the proposal indicating the ratings and quantity of major components viz. SPV Modules, nos. of arrays, AC & DC distributions, PCUs etc.	
iii)	Enclose the proposed layout of the SPV module array showing the spacing between arrays, walk way width etc.	
iv)	Confirm the minimum guaranteed annualized energy (KWH/year) that will be generated from solar energy source and available for internal use for 25 years.	Please fill up the format Enclosed under Annex. B for above solar plant
v)	Confirm the area required by the bidder for installation of SPV panels along with its structure, maintenance, walk-ways to provide a generating capacity of 40 kWp, 30 KWp, 15 kWp, 15kWp and 25 kWp as required in the e-Tender.	(i) Length in Meter _____ Width in Meter _____ Total area in sqm. _____
vi)	Enclose drawing showing typical arrangement for mounting of SPV modules along with dimension and nature of foundation for above solar plant	(plan, elevation and section to be enclosed)
vii)	Confirm the total quantum of AC power to be available from the installed SPV Modules	a) _____ KVA for 30, 40, 15, 15 and 25 KWp plant.
viii)	Confirm the location of energy meters to be provided for continuous measurement of AC power generated.	
ix)	Please confirm the acceptance test procedures to be adopted during FAT for the SPV Modules. Also indicate the standard to be followed.	

x)	Please confirm the acceptance test procedure to be adopted on completion of the work for the major components and the complete system at site.	
xi)	Please attach the Modbus Register mapping details of the offered Inverter(s) for communication.	

B. SCHEDULE OF TECHNICAL DATA TO BE FURNISHED BY THE CONTRACTOR

Note: Following technical data is to be furnished by the bidder separately for each solar plant i.e 40 KWp for MOB;30 KWp for AOB;15 KWP for civil lines;15 KWp for Tilak Nagar and 25 KWp for Kidwai Nagar

A	SPV MODULE	
i.	Manufacture's Name & Address	
ii.	Type of Modules with cat. Reference	
iii.	Design of module at standard test condition	
	a) Peak power watt	
	b) Peak power voltage	
	c) Peak power current.	
	d) Open circuit voltage	
iv.	No. of SPV Modules proposed to achieve minimum	
v.	Short circuit current of PV module (Amp.)	
vi.	Open circuit voltage of PV Module (V)	
vii.	Max. power rating of one PV Module (KWp) (not less than 500Wp)	
viii.	Photo electrical conversion efficiency of SPV module (not less than 15%)	
ix.	Fill factor of the SPV module (> 0.70)	
x	Designated life of the SPV modules	
xi.	Overall dimensions (in mm)	
xii.	Weight	
Xiii	Frame materials	
xiv.	Reference of Standards / approval, if any	
xv.	Life of SPV Module (Years of Operation)	
B	PV ARRAY CAPACITY	

	Number of Module in series in each array	
	Peak power rating of one array	
	Number of array considered to achieve the specified output	
C	MODULE MOUNTING STRUCTURE	
i)	Type of structure and its materials used in frame and accessories	
ii)	Type of mounting structures (Fixed or any other type)	
iii)	Overall dimensions	
iv)	Type of mounting	
v)	Surface azimuth angle of PV Modules	
vi	Tilt angle (Slope) of PV module	
vii.	Confirm structure & module frame shall be designed at wind speed 150 km/hr.	
D	POWER CONDITIONING UNITS (PCUs)	
i.	Manufacturer's name & address	
ii.	Type of PCU (Centralized or string type)	
iii.	Number of units proposed for each set of solar plant.	
iv.	Rated capacity of each PCU for each set of solar plant.	
v.	Input DC Voltage range of each PCU for each set of solar plant.	
vi.	Output voltage	
vii.	Frequency	
viii.	Minimum efficiency at full load	
ix.	Location (outdoor/indoor)	
x.	Output wave shape	
xi.	Dimensions in mm	
xii.	IP protection level	
xiii.	Type of cooling required	
xiv	Type of mounting	
xv.	Suitability for specified Ambient Temp. range & Humidity at _____	
xvi.	Type of Protection provided	
xvii	Over Load Condition	Yes/No
xviii	Short Circuit Protection	Yes/No

xix	Low/High Voltage Protection	Yes/No
xx	Power Electronic Component Protection Yes/No	Yes/No
E.	METERING	
i.	Nos. of meters proposed to be provided for measurement of actual value of AC/ DC voltage, Current & Energy generated (each day / cumulatively) by the PV system shall be provided.	
ii.	Location of meters	
iii.	Manufacturer's name & address	
iv	Confirm compliance with laid down specification	

Place:

Date:

Seal & Signature of the Tenderer.

ANNEXURE-“B”

Design, Supply, Installation, Testing and Commissioning of Grid connected, rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in Kanpur

GUARANTEED ENERGY GENERATION FOR 25 YEARS

Note 1): Efficiency of each solar PV System shall be guaranteed to minimum 90% at the end of 10 years and 80% at the end of 25 years.

Note 2): **Following technical data is to be furnished by the bidder separately for each solar plant i.e 40 KWp for MOB;30 KWp for AOB;15 KWP for civil lines;15 KWp for Tilak Nagar and 25 KWp for Kidwai Nagar**

Year	Total (KWh) of guaranteed generation
Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	
Year 7	
Year 8	
Year 9	
Year 10	
Year 11	
Year 12	
Year 13	
Year 14	
Year 15	
Year 16	
Year 17	
Year 18	
Year 19	
Year 20	
Year 21	
Year 22	
Year 23	
Year 24	
Year 25	

Place:

Date:

seal & Signature of the Tenderer.

Format for undertaking for product & maintenance support

(To be submitted by the Tenderer)

NAME OF WORK: Design, Supply, Installation, Testing and Commissioning of Grid connected, rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in Kanpur

.

Pursuant to a contract awarded by Reserve Bank of India for the full scope of work as contained under the e-Tender document for the above mentioned work or part thereof, we (*full name of the firm with address*), hereby undertake the complete responsibility for providing full product support and also maintenance support for the entire period of the designed life of the equipments so supplied and installed by us, promptly and expeditiously.

Further, in case any of the component(s), materials or parts used in the system so provided goes out of production, then we will make available the blue prints, drawings of the spare parts and specifications of materials at no cost to the RBI, as and when required in connection with the equipment to enable the RBI to procure spare parts from other sources.

Thanking You

Yours faithfully,

(Signature of the Contractor / Firm with Company's Seal)

Undertaking

(Undertaking by manufacturer of SPV Modules and PCUs regarding the manufacture's obligation to extend uninterrupted after sales service to RBI)

NAME OF WORK: Design, Supply, Installation, Testing and Commissioning of Grid connected, rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in Kanpur

We, the manufacturer of Solar Power System Component(s) undertake to provide continued after sales service including but not restricted to the following services.

- i) To guarantee uninterrupted supply of spare parts throughout the designed life of SPV modules and PCU's. The designed life of SPV modules and PCU's shall be as indicated elsewhere in the technical bid.
- ii) To assist RBI in investigation of failure/malfunctioning of any part or system as and when called for by RBI during and after defects liability period.
- iii) We shall propose with cost estimate, any modification / up gradation of safety features, design modification / improvements to be incorporated in the SPV modules and PCU's subsequent to completion of the contract and suggest a time schedule to implement the same to enhance performance, reliability / life of SPV modules and PCU's.
- iv) We hereby undertake to provide the above services and respond to RBI's queries/requests in reasonable time notified by RBI during the design life of the SPV modules and PCU's.
- v) Any breach of above undertaking will entail RBI to take any or all actions mentioned below as deemed fit by RBI.
 - a) To place on record the performance of firm either in the RBI Web Site or other publications.
 - b) Intimate the Regulatory Authorities / bodies or other Banks.
 - c) Restrict the firm's participation in further Tendering in RBI.

Date: *(Name and address of the company with Company Seal)*

Note: This undertaking shall be furnished by the manufacturer of SPV Modules and PCUs. In case the manufacturers of these two items are different, separate undertakings must be furnished by the respective manufacturer.

DECLARATION OF COUNTRY OF ORIGIN

Undertaking / Declaration / Certificate by the Bidder regarding country sharing land border with India

(To be submitted by bidders on their letter head duly sealed and signed by the authorized signatory)

To,
Reserve Bank of India
The Mall Road Kanpur-208001

Name of Work: Design, Design, Supply, Installation, Testing and Commissioning of Grid connected, rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in Kanpur

I/We _____ (Name and address, including Country of location of bidder) have read and understood the contents of the Office Memorandum (OM) F. No. 6/18/2019-PPD dated July 23, 2020 and its subsequent orders / revision issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India regarding the restrictions on procurement from a bidder of a country which shares a land border with India.

2. I/ We certify that _____ (Name of the bidder)

i. is not from a country sharing land border with India, or

ii. is from a country sharing land border with India and has been registered with the Competent Authority, the certificate of which is enclosed, or

iii. is from a country sharing land border with India where Government of India has extended lines of credit, or

iv. is from a country sharing land border with India where Government of India is engaged in development projects,

(Strikeout whichever of the above is not applicable).

3. I We further certify that _____ (Name of bidder) fulfils all requirements in this regard and is eligible to be considered under the provision of the above referred Office Memorandum and its subsequent orders / revision. I/We also undertake that even in case of contracts where we are permitted by the Bank/RBI to sub-contract I/we _____ (Name of bidder) will not sub-contract any work to a contractor from country(ies) sharing land border with India, unless such contractor fulfils all the requirements contained in the above referred office memorandum / order.

4. I/We know and understand that, if this Undertaking / Declaration / Certificate submitted by us is found to be false, the Bank shall be free to reject / terminate our tender / Work Order and that the Bank shall also be free to initiate any legal action in accordance with law including forfeiting of Earnest Money Deposit / Performance Bank Guarantee / Security Deposit and / or debarring us from participating in tenders invited by the Bank in future.

Signature and name of the authorized signatory of the Bidder with Rubber Stamp

Date:

Place:

Factory Acceptance Test

Solar PV Modules: The Solar PV modules shall be tested at the factory in the following manner:

- i) **Physical Inspection:** The PV modules shall be inspected for its physical parameters such as dimensions, material and workmanship etc.

- ii) **Performance Parameter:** The Solar PV modules shall be tested at the factory on a sun simulator at Standard Temperature Conditions (STC) for the following Parameters:
 - a) Open Circuit Voltage (V_{oc})
 - b) Short Circuit Current (I_{sc})
 - c) Max. Power ($P_{max.}$)
 - d) Voltage at Max. Power ($V_{max.}$)
 - e) Current at Max. Power ($I_{max.}$)
 - f) Fill Factor
 - g) Module efficiency

2. Power Conditioning Unit: The power conditioning unit shall be inspected for the display of parameters as mentioned in the e-Tender either at factory of OEM/Integrator or at site.

CLIENT's CERTIFICATE REG. PERFORMANCE OF CONTRACTOR

Name & address of the Client

Details of Works executed by Shri /M/s

- 1 Name of work with brief particulars
- 2 Agreement No. and date
- 3 Agreement amount
- 4 Date of commencement of work
- 5 Stipulated date of completion
- 6 Actual date of completion
- 7 Details of compensation levied for delay(indicate amount) if any
- 8 Gross amount of the work completed and paid
- 9 Name and address of the authority under whom works executed
- 10 Whether the contractor employed qualified Engineer/Overseer during execution of work?
- 11 i) Quality of work (indicate grading) Outstanding/Very Good/
Good/Satisfactory/poor
- ii) Amt. of work paid on reduced rates, if any.
- 12 i) Did the contractor go for arbitration?
- ii) If yes, total amount of claim
- iii) Total amount awarded
- 13 Comments on the capabilities of the contractor.
- a) Technical proficiency Outstanding/Very Good/
Good/Satisfactory/poor
- b) Financial soundness Outstanding/Very Good/
Good/Satisfactory/poor

c) Mobilization of adequate T&P	Outstanding/Very Good/ Good/Satisfactory/poor
d) Mobilization of manpower	Outstanding/Very Good/ Good/Satisfactory/poor
e) General behaviour	Outstanding/Very Good/ Good/Satisfactory/poor

Note : All columns should be filled in properly

“countersigned” by Reporting Officer* with Office seal.

*Officer of the rank of executive engineer/Superintending Engineer or equivalent in charge of the equipment installation.

FORMAT OF BANKERS' CERTIFICATE

1. Composition of the firm (whether Partnership”/ Private Limited/ Proprietorship/ Public Limited.)
2. Name of the Proprietor/ Partners/ Directors of the firm.
3. Turnover of the firm for the last 3 financial years (year wise).
2020-21
2021-22
2022-23
4. Credit facility/ Overdraft facility enjoyed by the firm.
5. Dealings (satisfactory/unsatisfactory) :
6. The period from which the firm has been banking with your bank.
7. Any other remarks.

You may also kindly forward your opinion whether the above firm is considered financially sound to be entrusted with the contract for works estimated to cost **Rs. 80.70 Lakhs** (Yes/No).

(Signature)

For the Bank

Note:

Bankers' certificates should be on letter head of the Bank, sealed in cover addressed to RBI .

In case of partnership firm, certificate should include names of all partners as recorded with the Bank

FORMAT FOR POWER OF ATTORNEY FOR SIGNING OF PROPOSAL

(On Non-Judicial Stamp Paper of appropriate value)

Know all men by these presents, We.....(Name of the Bidder and address of their registered office) do hereby constitute, appoint and authorize Mr. / Ms.
.....(Name and residential address of Power of Attorney holder) who is presently employed with us and holding the position ofas our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for the **Design, Supply, Installation, Testing and Commissioning of Grid connected, rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in Kanpur** , including signing and submission of all documents and providing information / responses to RBI, representing us in all matters before RBI, and generally dealing with RBI in all matters in connection with our proposal for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Note:

Power of Attorney should be properly stamped and notarized

Power of Attorney furnished shall be irrevocable.

Signature/(s) of the Bidder

Name/(s)

Stamp/Seal of the Bidder

(NB: This guarantee will require stamp duty as applicable in the state, where it is executed and shall be signed by the official whose signature and authority shall be verified).

Proforma of Bank Guarantee for Security Deposit

(To be submitted on Non-judicial stamp paper of appropriate value purchased in the name of the issuing bank)

No. _____ Date _____

To:

The Regional director
Reserve Bank of India
Estate Department
Kanpur

Dear Sir

In consideration of your agreeing to accept the security deposit of INR _____ (INR _____ only) furnishable to you by M/s _____ (hereinafter referred to as “the Contractor”) in terms of their contract with you for **Design, Supply, Installation, Testing and Commissioning of Grid connected, rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in Kanpur** as per their e-Tender dated _____ and your Special Conditions of Contract and other e-Tender documents relating thereto subject to the conditions and alterations mutually agreed upon the set forth or referred to in your Contract dated _____ in the form of guarantee from us in the manner hereinafter contained, we _____ (Name of the Bank) do hereby covenant and agree with you as follows:

1. We undertake to indemnify you and keep you indemnified from time to time to the extent of INR(_____ only) against any loss or damage caused to or suffered by or that may be caused to or suffered by you by reason of any breach or breaches on the part of the Contractor of any of the terms and conditions contained in the said Contract and in the event of the Contractor making any default or default in carrying out any of the work under the said Contract or otherwise in the observance and performance of any of the terms and conditions relating thereto in accordance with the true intent and meaning thereof, we shall forthwith on demand pay to you such sum or sums not exceeding in total the said sum of INR _____ (INR_____ only) as may be claimed by you as your losses and/or damages, costs, charges or expenses by reason of such default on the part of the Contractor.
2. Notwithstanding anything to the contrary, your decision as to whether the Contractor has made any such default or defaults and the amount or amounts to which you are entitled by reasons thereof will be binding on us and we shall not be entitled to ask you to establish your claim or claims under this Guarantee but will pay the same forthwith on your demand without any protest or demur.
3. This guarantee shall continue and hold good until it is released by you on the application by the Contractor after expiry of the relative guarantee period of the said Contract and after the contractor had discharged all his obligations under the said

Contract and produced a certificate of due completion of the work under the said contract and submitted a "No Demand Certificate", provided always that this guarantee shall in no event remain in force after the day of _____ without prejudice to your claim or claims arisen and demanded from or otherwise notified to us in writing before the expiry of six months from the said date which will be enforceable against us notwithstanding that the same is or are enforced after the said date.

4. Should it be necessary to extend this guarantee on account of any reason whatsoever, we undertake to extend the period of this Guarantee on your request till such time as may be required by you. Your decision in this respect shall be final and binding on us.
5. You will have the fullest liberty without effecting this guarantee from time to time to vary any of the terms and conditions of the said contract or extend the time of performance of the Contractor or to postpone for any time or from time to time any of your rights or powers against the Contractor and either to enforce or forbear to enforce any of the terms and conditions of the said Contract and we shall not be released from our liability under this guarantee by the exercise of your liberty with reference to matters aforesaid or by reason of any time being given to the Contractor or any other forbearance, act or omission on your part or any indulgence by you to the Contractor or by any variation or modification of the said contract or any other act, matter or things whatsoever, which under the law relating to sureties would but for the provisions hereof have the effect of so releasing us from our liability hereunder provided always that nothing herein contained will enlarge our liability hereunder beyond the limit of INR _____ (INR _____ only) as aforesaid.
6. This guarantee shall not in any way be affected by your taking or varying or giving up any securities from the Contractor or any other person, firm or company on its behalf or by the winding up, dissolution, insolvency or death as the case may be, of the Contractor.
7. In order to give full effect to the guarantee herein contained you shall be entitled to act as if we were your principal debtors in respect of all your claims against the Contractor hereby guaranteed by us as aforesaid and we hereby expressly waive all our rights of surety-ship and other rights, if any, which are in any way inconsistent with any of the provisions of this guarantee.
8. Subject to the maximum limit of our liability as aforesaid, this guarantee will cover all your claim or claims against the contractor from time to time arising out of or in relation to the said contract and in respect of which your claim in writing is lodged on us before expiry of six months from the date of expiry of this guarantee.
9. Any notice by way of demand or otherwise hereunder may be sent by special courier, telex, fax or registered post to our local address as aforesaid and if sent by post, it shall be deemed to have been given when the same has been posted.

10. This guarantee and the powers and provisions herein contained are in addition to and not by way of limitation of or substitution for any other guarantee or guarantees heretofore given to you by us (whether jointly with others or alone) and now existing uncanceled and that this guarantee is not intended to and shall not revoke or limit such guarantee or guarantees.
11. This guarantee shall not be affected by any change in the constitution of the contractor or us nor shall it be affected by any change in your constitution or by any amalgamation or absorption thereof or therewith but will ensure to the benefit of and be available to and enforceable by the absorbing or amalgamated company or concern.
12. Any forbearance, act or omission on the part of the Bank in enforcing any of the conditions of the said e-Tender or showing of any indulgence by the Bank to the e-Tenderer shall not discharge the Surety in any way and the obligations of the Surety under this guarantee shall be discharged only on the intimation thereof being given to the Surety by the Bank.
13. This guarantee is irrevocable during the period of its currency and shall not be revoked without your previous consent in writing.
14. We further agree and undertake to pay you without demur the amount demanded by you in writing notwithstanding any difference or dispute or controversy that may exist or arise between you and contractor or any other person.
15. Notwithstanding anything contained herein above our liability under this guarantee is restricted to INR _____ (INR _____ only). Unless a written claim is lodged on us for payment under this guarantee within six months from the date of expiry, including extensions if any, of this guarantee all your rights under the guarantee shall be forfeited and we shall be deemed to have been released and discharged from all liabilities there under, irrespective of whether or not the original guarantee is returned to us.
16. We have power to issue this guarantee in your favor under the Memorandum and Articles of Association of our Bank and the undersigned has full power to execute this Guarantee under the Power of Attorney granted to him by the Bank.

SIGNED AND DELIVERED

(For & on behalf of the above named Bank)

For & on behalf of
(Bankers Name & Seal)

BRANCH MANAGER
(Bankers Seal)
Address -----

Reserve Bank of India
Estate Department
Un Priced Bill of Quantities (Not for Quote)

Design, Supply, Installation, Testing and Commissioning of Grid connected, rooftop SPV based Solar Power Plant of various capacities at Bank's Office premises and residential premises in Kanpur			
S.N.	Description of Item (s)	Quantity	Unit
	Capital Cost of the system		
1.	<p>Design, Supply, Installation, Testing & Commissioning of solar photovoltaic (SPV) based grid connected rooftop Solar Power Plant with a guaranteed annualized AC energy output per year as specified in technical specifications given part I of the tender Section VII)during the first five years of operation including required quantities of SPV modules formed into arrays, their mounting arrangements, power conditioning units, required DC & AC distribution panels with surge protection units, cabling [from PV module to inverter and from inverter to the location of Mains power source], data loggers for remote system performance monitoring through licensed software, three sets of Chemical/Compound earthing using copper coated earth electrode of dia. 80mm & length approx. 3.0 meter at least at a depth of 10 feet including earthing chamber with GI cover plate (IS: 3043/1966 amended till date) and supply and laying of earth strip with 25x6 mm GI strip laid upto lightning arrestors, body earth and neutral earth as per requirements and as directed by Banks engineers ,safety arrangements, related civil work, including training etc. as defined in the scope of work, technical specification and in accordance with the laid down functional requirement and specification to provide a composite operational system.[the rate inclusive of all statutory taxes including GST, levies, insurance, transportation etc.) Rate quoted shall be inclusive of data charges for the remote data monitoring system throughout the life of solar power plant.</p> <p>Note: Contractors are advised to visit the site before quoting the bids to acquaint themselves with site conditions.</p>		

a)	40 KWp in Main office building (building height as 16 mtrs approx.)	1	Job
b)	30 KWp in Additional Office building (building height as 16 mtrs approx.)	1	Job
c)	15 KWp in Civil Lines Colony (Block No D) (building height as 10 mtr approx.)	1	Job
d)	15 KWp in Tilak Nagar Colony (Block No B)(building height as 13 mtrs approx.)	1	Job
e)	25 KWp in Kidwai Nagar Colony (block No J&K) (building height as 13 mtrs approx.)	1	Job
Capital Cost of the System -----A			
2.	Comprehensive Maintenance		
	Rate for Comprehensive Annual Maintenance Charge of complete system as provided under the main contract, for periodic cleaning of PV cells, PCU etc. to ensure the committed minimum power generation including replacement of all spares, consumables for trouble shooting, routing, preventive and breakdown maintenance etc. as required as per good engineering practice, recommendation (s) the respective equipment manufacturer (s) and instructions of engineer-in-charge for maintaining the system (s) in acceptable functional and serviceable state etc. as specified and as per the scope of work laid down in the part-I of tender. The rate shall include all applicable statutory Taxes, duties, levies, insurance, transportation etc. including GST. Rate quoted shall be inclusive of data charges for the remote data monitoring system during the period of CAMC.		
a)	40 KWp in Main office building	Per Annum	
b)	30 KWp in Additional Office building	Per Annum	
c)	15 KWp in Civil Lines Colony (Block No D)	Per Annum	
d)	15 KWp in Tilak Nagar Colony (Block No B)	Per Annum	

e)	25 KWp in Kidwai Nagar Colony (block No J&K)	Per Annum	
	Total Comprehensive Maintenance Charges above ----- B		

Total Owning Cost = [A + (B x 7.0476)]

Place:

Date:

Seal & signature of the Tenderer