

RESERVE BANK OF INDIA ESTATE DEPARTMENT CHENNAI

(e-Tendering only)
Tender Document

RBI/Chennai/ Estate/ 232 /23-24/ ET/ 320

Part I (Techno-Commercial Bid)

(Containing Section I to Section XI)

Tender for Design, supply, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar.

Date from which e-Tender will be available on MSTC website	17:00 Hrs. on August 04, 2023 onwards
Date & time of Pre-bid meeting	Offline at 14:30 Hrs. on September 01, 2023 (Venue: Reserve Bank of India, Estate Department, II Floor, Rajaji Salai, Fort Glacis, Chennai-600001).
Last date of submission of EMD	14:00 Hrs. on September 15, 2023
Last date of submission of e-Tender	15:00 Hrs. on September 15, 2023

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महत्वपूर्ण सूचना

महत्वपूण सूचना	
a. ई-निविदा सं.	आरबीआई / चेन्नै / संपदा / 232 / 23-24 / ईटी / 320
b.कार्य का नाम	बेसेंट नगर, चेन्नई स्थित बैंक की स्टाफ क्वार्टर्स में 45
	केडब्लयूपी 2) X 20केडब्लयूपी और 1 x 5केडब्लयूपी (ग्रिड
	इंटरएक्टिव सौर ऊर्जा संयंत्र का डिजाइन, आपूर्ति, स्थापना,
	परीक्षण और कमीशनिंग) डीएसआईटीसी
c. निविदा का प्रकार	ई प्रोक्यूरमेंट प्रणाली-(<u>www.mstcecommerce.com/</u>
	eprochome/rbi के माध्यम से ऑनलाइन भागा-तकनीकी-
	<u>-वाणिज्यिक बोली और भाग2 मूल्य बोली) -</u>
	निविदा दस्तावेज में ईनिर्देश दिए गए हैं।-निविदा के लिए दिशा-
d. कार्य की अनुमानित लागत	₹33.50 लाख (जीएसटी सहित)
e. पार्टियों को डाउनलोड करने के लिए एनआईटी की	04 अगस्त, 2023 को 17:00 बजे से
उपलब्धता तारीख	04 अगस्त, 2023 पर्रा 17:00 वज स
	01 सितम्बर, 2023 को 14.30 बजे ऑफलाइन (स्थानः
f.बोली-पूर्व बैठक	भारतीय रिज़र्व बैंक, संपदा विभाग, दूसरी मंजिल, राजाजी सालै,
	फोर्ट ग्लासिस, चेन्नै 600 001)
g. www.mstcecommerce.com/eprochome/rbi	पगट ग्लासिस, पत्र ७०० ००।)
में तकनीकी-वाणिज्यिक बोली और कीमत बोली ऑनलाइन प्रस्तुत करने के लिए ई-निविदा शुरू करने की	सितम्बर 05, 2023 को 15:00 बजे से
तारीख h. बयाना जमा राशि	प्रत्येक बोलीकर्ता से ₹ 67,000/ -
i. ईएमडी प्रस्तुत करने की अंतिम तारीख	सितम्बर 15, 2023 को 14:00 बजे
j. तकनीकी-वाणिज्यिक बोली और मूल्य बोली	
ऑनलाइन प्रस्तुत करने के लिए ई-निविदा बंद करने की तारीख	सितम्बर 15, 2023 को 15:00 बजे
k. निविदा खोलने की तारीख और समय	सितम्बर 15, 2023 को 15:30 बजे को निविदा का भाग-।
	(तकनीकीवाणिज्यिक बोली-) खोला जाएगा। भाग ॥ मूल्य बोली))
	उसके बाद के तारीख में खोला जाएगा जिसकी सूचना बोलीकर्ता
	को दी जाएगी।
।. लेनदेन शुल्क-	एमएसटीसी पोर्टल में सूचित किए अनुसार लेन-देन शुल्क का
	भुगतान एमएसटीसी लिमिटेड के पक्ष में एमएसटीसी पेंमेंट गेटवे/एनईएफटी/आरटीजीएस
m. निविदा आमंत्रित करने वाले प्राधिकारी के कार्मिक के	1. श्रीमती(इलेक्ट- एजीएम) रेवती कोट्टाकोटा ., 044-
संपर्क विवरण	25399261 (तकनीकी प्रश्नों के लिए:मेल आईडी - (
	revatikottakota@rbi.org.in
	2. श्री हर्षल दीपक पाटिल, एएम, नंबर 044- 2539 9088, (ई-
	:मेल आईडी - (टेंडर प्रश्नों के लिए harshalpatil@rbi.org.in
	3मुथु मारी एम ., सहायक, नंबर 044- 2539 9088, (ईनिविदा -
	:मेल आईडी - (प्रश्नों के लिएmuthumarim@rbi.org.in

Important Information

a. E-tender No.	RBI / Chennai / Estate / 232 / 23-24 / ET / 320
b. Name of work	Design, supply, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar, Chennai
c. Mode of Tender	e-Procurement System (Online Part I - Techno-Commercial Bid and Part II - Price Bid through www.mstcecommerce.com/eprochome/rbi) - Guidelines for e-tender has been provided in tender document
d. Estimated cost of the work	Rs. 33.50 Lakh (inclusive of GST)
e. Date of NIT available to parties to download	17:00 Hrs. on August 04, 2023 onwards
f. Pre-Bid Meeting	Offline at 14:30 Hrs. on September 01, 2023 (Venue: Reserve Bank of India, Estate Department, II Floor, Rajaji Salai, Fort Glacis, Chennai-600001).
g. Earnest Money Deposit	₹ 67,000/- from each bidder.
h. Date of starting of e-Tender for submission of online Techno-Commercial Bid and price Bid at www.mstcecommerce.com/eprochome/rbi	15:00 Hrs. on September 05, 2023 onwards.
i. Last date of submission of EMD.	14:00 Hrs. on September 15, 2023
j. Date of closing of online e-tender for submission of Techno-Commercial Bid & Price Bid.	15:00 Hrs. on September 15, 2023
k. Date & time of opening of Tender	Part I (Techno-Commercial Bid) of the tender shall be opened at 15:30 Hrs on September 15, 2023. Part II (Price Bid) shall be opened on a later date after scrutiny of documents which shall be intimated to the qualified bidders.
I. Transaction Fee	Payment of Transaction Fee as mentioned in the MSTC portal through MSTC payment gateway / NEFT / RTGS in favour of MSTC Limited.
m. Contact details of tender inviting authority personnel.	1. Smt. Revati Kottakota (AGM- Elect), 044-25399261 (for technical queries)- mail ID: revatikottakota@rbi.org.in . 2. Shri Harshal Deepak Patil, AM, No. 044-2539 9088, (for e-tender queries) - mail ID: harshalpatil@rbi.org.in 3.Shri. Muthu Mari M, Assistant, No. 044-2539 9088, (for e-tender queries) - mail ID: muthumarim@rbi.org.in

Annexure I: Important Instructions for E – Procurement

Process of e-tender:

A) <u>Registration:</u> 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 Techno-Commercial Bid as well as Price Bid will be done over the internet. The vendor should possess Class III signing type Digital Certificate. Vendors must 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 Techno-Commercial Bid and Price Bid must be submitted on-line through 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 e-mail 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 Persons (RBI - During Office Hours only):

- Smt. Revati Kottakota (Asst General Manager Electrical) 044- 2539 9261/ (revatikottakota@rbi.org.in)
- II. Shri. Randeep Sangwan (AM-Electrical) 044-2539 9820 (randeepsangwan@rbi.org.in)
- III. Shri Harshal Deepak Patil, AM, No. 044- 2539 9088, (for e-tender queries) mail ID: harshalpatil@rbi.org.in
- IV. Shri. Muthu Mari M (Assistant) 044- 2539 9088 (<u>muthumarim@rbi.org.in</u>)

Contact Persons (MSTC Ltd – During Office Hours only):

- 1. Shri. Shanmugam 9176397264 Email id: nshanmugam@mstcindia.co.in
- 2. Shri. J Damodaran—9841002253 Email id: jdamodaran@mstcindia.co.in
- 3. MSTC Help Line:9499054101/2/3/4. Email id: helpdesk@mstcindia.co.in

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 e-mail 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 for a sum of ₹67000/- (Rupees sixty seven Thousand only) shall be remitted to Bank Account of Reserve Bank of India on or before 14:00 Hrs. of September 15, 2023 "EMD – Estate Dept" shall be given as remarks while remitting EMD.

The account details for NEFT / RTGS transactions are as follows.

Beneficiary Name: RBI CHENNAI

IFSC: RBIS0CNPA01 Account No: 186003001

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 estatechennai@rbi.org.in.

A tender which is not accompanied by such EMD will not be considered.

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

- b) The process involves Electronic Bidding for submission of 'Techno-Commercial Bid' and 'Price Bid'.
- c) The vendor(s) who have submitted transaction fee can only submit their Bids 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 run JAVA application. This exercise has to be done immediately after opening of Bid floor. Then they have to fill up Common terms / Commercial specifications and save the same. After that, they should click on the 'Techno-Commercial Bid'. If this JAVA application does not run, then the vendor will not be able to save / submit his 'Techno-Commercial Bid'.
- e) After filling the 'Techno Commercial Bid', vendors must click 'save' for recording the same. Once the 'Price Bid' link becomes active and the details

are filled up, vendors have to click on "save" to record the 'Price Bid'. After both the 'Techno-Commercial Bid' & 'Price Bid' have been saved, vendor must click on the "Final submission" button to register the bids.

- f) Pages of Part I (Techno-Commercial Bids) of the tender where details shall be filled in and signed, shall be downloaded from the uploaded tender documents, details filled in, signed and uploaded. 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 the work.
- k) It is mandatory that all the bids are submitted with Digital Signature Certificate otherwise the same will not be accepted by the system.
- 1) 'Buyer' reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part, without assigning any reason thereof.

No deviation from the terms and conditions of the tender document is acceptable after the pre-bid meeting. No queries will be entertained after the pre-bid meeting. 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.

खंड 1 /Section I

निविदा फार्म /Form of Tender

स्थान/ Place	
नां क / Date	

क्षेत्रीय निदेशक/The Regional Director भारतीय रिज़र्व बैंक/Reserve Bank of India, संपदा विभाग/Estate Department फोर्ट ग्लेसिस16-/Fort Glacis-16 राजाजी साल्लै ,पी.बी.संख्या40 /Rajaji Salai, P.B.No 40, चेन्नै600001 /Chennai-600 001

महोदया/य Dear Sir / Madam,

इसमें इसके पश्चात ज्ञापन में विनिर्दिष्ट कार्यों से संबंधित विनिर्देशनों, डिजाइनों और मात्राओं की अनुसूची की जांच कर और उक्त ज्ञापन में विनिर्दिष्ट कार्य-स्थल देखकर एवं जांचकर तथा निवदा को प्रभावित करनेवाली तत्संबंधी अपेक्षित जानकारी प्राप्त कर, मैं / हम एतद्द्वारा उक्त ज्ञापन में विनिर्दिष्ट समय के भीतर, संलग्न की गई मात्राओं की अनुसूची में उल्लिखित दरों पर निवदा में दिए गए करार के अंतर्नियमों, संविदादारों के लिए विशेष अनुदेशों, संविदादारों को सामान्य अनुदेश तथा विशेष शर्तों, शर्तों मात्राओं की अनुसूची एवं संविदा की शर्तों में लिखित रूप में दिए गए विनिर्देशनों, डाटा शीट और मात्राओं की अनुसूची और इसके लिये उपलब्ध करायी गयी सामग्रियों के साथ तथा अन्य सभी मामलों में ऐसी शर्तों के अनुसार जहाँ तक वे लागू हों, उक्त ज्ञापन में विनिर्दिष्ट कार्य को निष्पादित करने का प्रस्ताव रखता हूँ/ रखते हैं।

We have carefully examined the specifications, designs and schedule of quantities relating to the works specified in the memorandum hereinafter set out and have 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 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.

ज्ञापन/MEMORANDUM

1	Description of work	Tender for Design, supply, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar
2	Estimated cost	₹33.5 lakh inclusive of GST
3	Earnest Money	₹ 67,000/-
4	Time allowed for completion of work	03 months from tenth day of the date of work order.

1. हम इससे भी सहमत है कि निविदा खोलने की दिनांक से हमारी निविदा 90 दिनों तक बैंक के लिए स्वीकार करने के लिए वैध रहेगी और वैधता की यह अविध बैंक और हमारे बीच लिखित आपसी सहमित के बाद बढ़ाई जा सकती है।

We also agree that our tender will remain valid for acceptance by the Bank for 90 days from the date of opening of Part I of the tender and this period of validity can be extended for such period as may be mutually agreed between the Bank and us in writing. We also agree to keep the earnest money valid during the entire period of validity of tender.

2. निविदा स्वीकार होने पर मैं/हम यहां संलग्न संविदा को उक्त शर्तों के निबंधनों एवं प्रावधानों को पूरा करने और उसका पालन करने के लिए या उसमें चूक करने पर संविदा की लिखित में स्वीकृति सहित उक्त शर्तों में वर्णित बयाना जमा राशि जब्त किये जाने और आपके उत्तराधिकारियों, समुनेदेशियों या नामितों को अदा करने के लिए सहमत हूँ/हैं।

Should this Tender be accepted, I/we hereby agree to abide by and fulfil all the terms and Conditions of the 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 tender together with the written acceptance of the Contract.

3. मैं /हम यह बात समझते हैं कि आपके पास बिना कोई कारण बताए सभी या किसी निविदा को स्वीकार करने या अस्वीकार करने का अधिकार सुरक्षित है। हमने रु15,680 की राशि बयाना जमा राशि के रूप में भारतीय रिज़र्व बैंक के पास जमा की है जिस पर कोई ब्याज देय नहीं होगा। यदि हम सूचित किए गए अनुसार संविदा को निष्पादित करने में असफल रहते हैं तो हम इस बात से सहमत है कि भारतीय रिज़र्व बैंक द्वारा इस राशि को जब्त कर लिया जाएगा।

I/We understand that you reserve the right to accept or reject any or all the tender either in full or in part without assigning any reason therefor. We have deposited a sum of ₹67,000/- as earnest money with the Reserve Bank of India, which amount is not to bear any interest. Should we fail to execute the Contract

when called upon to do so, we do hereby agree that this sum shall be forfeited by us to the Reserve Bank of India.

4. निविदा को दो भागों में अपलोड किया जाना चाहिए । भाग 1- में सभी वाणिज्यिक शर्तें और तकनीकी ब्यौरे हैं और भाग 2 में बैंक के प्रोफार्मा में केवल मूल्य बोली है।

The Tender should be uploaded in two parts. Part I contains all commercial terms & conditions and technical particulars and Part II contains only the price bid in the Bank's proforma.

वर्ष 2023 केमहीने केदिन को हस्ताक्षरित /Dated thisday of_2023
मैसर्स के लिए और उनकी ओर से /For and on behalf of M/s
(सील सहित हस्ताक्षर (/(Signature with seal)
नाम /Name
पदनाम /Designation:
स्थान /Place
स्थान /Date
)उपर्युक्त हस्ताक्षरी की पॉवर ऑफ अटार्नी की प्रमाणित प्रति संलग्न की जानी चाहिए/Certified true copy of the Power of Attorney of the above signatory should be enclosed).
साक्षी /Witnesses (1) नाम, पता और दिनांक सहित हस्ताक्षर/ Signature with name, address and date
(2) नाम, पता और दिनांक सहित हस्ताक्षर /

करार की शर्तें/ Articles of Agreement

गए है।

कार्यालय मुंबई में है) जिसे इसके बाद" बैंक "कहा गया है	(और दूसरी ओर) जिसे
इसके बाद संविदाकार कहा गया है (के बीच	े को किया गया।	,
ARTICLES OF AGREEMENT made the		
Reserve Bank of India, Fort Glacis, Rajaji Sala Office at Mumbai-400001 (hereinafter called		
· · · · · · · · · · · · · · · · · · ·	,	Contractor") on the
other part.		
जबिक नियोक्ता बेसेंट नगर, चेन्नई स्थित बैंक की स्टाफ व	क्वार्टर्स में 45 केडब्ल	यूपी (2 X 20 केडब्लयूपी
और 1 x 5 केडब्लयूपी) ग्रिड इंटरएक्टिव सौर ऊर्जा संयं	त्र का डिजाइन, आपूर्ी	र्ति, स्थापना, परीक्षण और
कमीशनिंग (डीएसऑईटीसी) करने का कार्य को दर्शान	ने और कार्य का वर्णन	न करने वाले विनिर्देशनों

यह करार एक ओर भारतीय रिजर्व बैंक फोर्ट ग्लेसिस राजाजी साल्लै चेन्नै-600 001 जिसका केंद्रीय

WHEREAS the Employer is desirous of taking up the work of "Design, supply, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar." and has caused specifications and Schedule of Quantities describing the works to be done which have been signed by or on behalf of the parties hereto

और मात्राओं की अनुसूची को तैयार किया है जिस पर दोनों पार्टियों ने या उनकी ओर से हस्ताक्षर किए

और जबिक कार्य का वर्णन करने वाले विनिर्देशनों और मात्राओं की अनुसूची पर इसके पक्षकारों द्वारा अथवा उनकी ओर से हस्ताक्षर किए गए हैं।

AND WHEREAS the said specifications, the Schedule of Quantities and drawings have been signed by or on behalf of the parties hereto.

और जबिक संविदाकार शर्तों के अधीन आगे यहाँ नियत शर्तों और विशेष शर्तों में निर्धारित शर्तों और काम की मात्रा की अनुसूची और संविदा की शर्तों (जिन्हें इसके बाद सामूहिक रूप से " तथाकिथत शर्तें " कहा जाएगा)के अनुसार काम को उक्त ड्राइंग और/या उक्त विनिर्देशन में वर्णित है और काम की मात्रा की अनुसूची में शामिल है ,पर उसमें निर्धारित संबंधित दर पर गणना की गई कुल राशि पर या ऐसी अन्य देय राशि पर (इसके बाद इसे " तथाकिथत संविदा राशि "कहा जाएगा)कार्य करने के लिए सहमत है।

AND WHEREAS the Contractor has agreed to execute upon the subject 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 (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 specification and included in the Schedule of Quantities at the respective rates therein set forth amounting to the sum as therein arrived at or such other sum as shall become payable thereunder(hereinafter referred to as 'the said Contract Amount').

एतद्वारा अब निम्नानुसार सहमति हुई है-: NOW IT IS HEREBY AGREED AS FOLLOWS:

1. संविदाकार तथाकथित शर्तों में उल्लिखित समय और नियत तरीके से तथाकथित संविदा राशि के भुगतान करने के मद्देनज़र ,तथाकथित शर्तों के अधीन विनिर्देशनों के अनुसार नियत ड्राइंग और काम की मात्राओं की अनुसूची में दर्शाया गया काम पूरा करेगा।

In consideration of 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 Drawings and described in the said Drawings and the Schedule of Quantities.

2. बैंक संविदाकार को कथित संविदा राशि अथवा समय-समय पर देय होनेवाली अन्य राशि तथाकथित शर्तों मेंविनिर्दिष्ट तरीके से अदा करेगा।

The Bank 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.

3. तथाकथित शर्तें और साथ में दी गई परिशिष्ट इसके साथ पढ़ी जाएंगी और इस करार का हिस्सा मानी जाएंगी और संबंधित पक्ष इस करार की तथाकथित शर्तों के अधीन रहेंगे और अपनी ओर से क्रमशः तथाकथित शर्तों के अपने-अपने कर्तव्य का पालन करेंगे।

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.

4. इसमें उल्लिखित प्लान ,करार एवं दस्तावेज इस संविदा के आधारभूत घटक होंगे।

The plans, agreement and documents mentioned herein shall form the basis of this Contract.

5. यह संविदा न तो स्थायी एकमुश्त ठेका है और न ही खंडित कार्य संविदा। अपितु यह अनुसूची में निहित दरों पर वास्तविक मात्राओं और संभाव्य मात्रा अथवा तथाकथित शर्तों के अनुसार रु _____ बेसेंट नगर में स्थित बैंक की स्टाफ क्वार्टर्स के लिए 45 केडब्लयूपी ग्रिड इंटरएक्टीव एसपीवी आधारित रूफटॉप सोलार पावर सिस्टम की डिज़ाइन, आपूर्ति, अधिष्ठापन, परीक्षण करने का कार्य करने के लिए संविदा है।

This Contract is neither a fixed Lump sum Contract nor a Piece Work Contract but is a Contract to carry out the work of "Design, supply, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters , Besant Nagar." for ₹_____/- (Rupees _____ only) to be paid for according to actual measured quantities at the rates contained in the Schedule of Rates and Probable Quantities or as provided in the said conditions.

6. बैंक के पास इस संविदा पर प्रतिकूल प्रभाव डाले बिना काम की किसी भी मद की ड्राइंग और काम की प्रकृति बदलने ,कोई मद जोड़ने या किए गए काम की मद को निकालने का अधिकार सुरक्षित होगा।

The Bank 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 without prejudice to this contract.

7. समय इस संविदा का महत्वपूर्ण कारक है और संविदाकार एतद्द्वारा सहमत है कि समय विस्तार का प्रावधान होते हुए भी वह कार्य आदेश जारी करने की दिनांक से दसवें दिन से तथाकथित शर्तों में उल्लिखित किए गए अनुसार जो भी बाद में हो, काम शुरू कर देगा और उसके बाद कार्य आदेश की तारीख के 10 वें दिन से 3 महीने की अविध के भीतर पूरा काम करेगा।

Time shall be considered as the essence of this Contract and the contractor hereby agrees to commence the work from tenth day of the date of issue of work order as provided for in the said Conditions and to complete the entire work **within a period of 3 months from the 10**th **day of date of work order** subject nevertheless to the provisions 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.

- 8. इस संविदा के अंतर्गत बैंक द्वारा सभी भुगतान केवल चेन्नै में किए जाएंगे।
 - All payments by the Bank under this Contract will be made only at Chennai.
- 9. इस करार के तहत या इससे जुड़े किसी भी कारण से उत्पन्न विवाद चेन्नै में उत्पन्न विवाद समझा जाएगा और उसके निपटान का क्षेत्राधिकार चेन्नै में ही स्थित न्यायालयों का निर्धारित क्षेत्राधिकार होगा।

All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Chennai and only Courts in Chennai shall have jurisdiction to determine the same.

10. संविदाकार/एजेंसी कार्यस्थलों पर महिलाओं का यौन उत्पीड़न) रोकथाम, निषेध और निवारण (अिधनियम, ") 2013 अिधनियम ("के प्रावधानों का पूर्ण अनुपालन करने के लिए पूरी तरह जिम्मेदार होंगे। भारतीय रिज़र्व बैंक) चेन्ने कार्यालय (के परिसर के भीतर अपने कर्मचारी के खिलाफ यौन उत्पीड़न की किसी भी शिकायत के मामले में शिकायत संविदाकार/एजेंसी द्वारा गठित शिकायत समिति के समक्ष दायर की जाएगी संविदाकार/एजेंसी उक्त शिकायत के संबंध में अिधनियम के अंतर्गत समुचित कार्रवाई सुनिश्चित करेगा। संविदाकार के किसी पीड़ित कर्मचारी द्वारा बैंक के किसी कर्मचारी के विरुद्ध की गई यौन उत्पीड़न की किसी भी शिकायत का संज्ञान बैंक द्वारा गठित क्षेत्रीय शिकायत समिति द्वारा लिया जाएगा।

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. 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.

11.यदि घटना में संविदाकार का कोई कर्मचारी शामिल होता है तो उस स्थिति प्रदान की जाने किसी भी मौद्रिक प्रतिपूर्ति के लिए संविदाकार उत्तरदायित्व होगा ,उदाहरण के लिए बैंक के किसी कर्मचारी को दी जाने वाली मौद्रिक राहत यदि संविदाकार के कर्मचारी द्वारा यौन हिंसा सिद्ध हो जाती है। कार्यस्थल पर यौन उत्पीड़न की रोकथाम और अन्य संबंधित मुद्दों पर अपने कर्मचारियों को शिक्षित करने की जिम्मेदारी संविदाकार की होगी।संविदा में विनिर्दिष्ट किए गए अनुसार कार्य की आवश्यक गति को बनाए रखने और कारीगरी की गुणवत्ता को सुनिश्चित करने के लिए पर्याप्त संख्या में श्रिमकों को काम पर रखेगा। संविदाकार कार्य के संबंध में अठारह वर्ष से कम के किसी व्यक्ति को काम पर नहीं रखेगा।

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. The contractor shall be responsible for educating its employees about prevention of sexual harassment at work place and related issues. The Contractor shall employ its labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the Contract and to the satisfaction of the RBI. The Contractor shall not employ in connection with Works any person who has not completed eighteen years of age.

12. संविदाकार द्वारा काम पर लगाए गए सभी श्रमिक या कर्मचारी संविदाकार के कर्मचारी माने जाएंगे और ऐसे श्रमिकों /कर्मचारियों के संबंध में भारतीय रिज़र्व बैंक पर किसी भी प्रकार की प्रकृति की जिम्मेदारी नहीं होगी। संविदाकार उसके द्वारा काम पर लगाए गए श्रमिकों को सीधे ही मजदूरी का भुगतान करेगा जो कि न्यूनतम मजदूरी अधिनियम के रूप में उचित मजदूरी से कम नहीं होगी। उचित मजदूरी का अर्थ है वह मजदूरी जिसमें साप्ताहिक अवकाश के दिन के लिए मजदूरी और समय अथवा कार्य के भाग के लिए अन्य भत्ते शामिल होंगे। यह भत्ते आसपास दिए जा रहे ऐसे ही रोजगार के लिए प्रचलित बाजार दर के आधार पर दिए जाएंगे लेकिन ये भत्ते न्यूनतम मजदूरी अधिनियम के अंतर्गत निर्धारित मजदूरी से कम नहीं होंगे।

All the workers or employees deployed by the contractor shall consider the employees of contractor and RESERVE BANK OF INDIA shall not have any liability what so ever in nature in regard to such workers / employees. The Contractor shall pay to labour employed by him directly wages not less than fair wages as per Minimum Wages Act. Fair Wage means wages, which shall include wages for weekly day of rest and other allowances whether for time or piece work, after taking into consideration prevailing market rates for similar employment in the neighbourhood but shall not be less than the minimum rates of wages fixed under the payment of Minimum Wages Act.

13. संविदाकार उसके द्वारा या उसके उप-संविदाकार द्वारा काम पर लगाए गए श्रमिकों के संबंध में बोलीदाता श्रम विनियमन में उल्लखित सभी मामलों के संबंध में अनुपालन करेगा। संविदाकार मजदूरी अधिनियम, 1936, न्यूनतम मजदूरी अधिनियम, 1948, बैंक दायित्व अधिनियम, 1938, कर्मकार प्रतिकर अधिनियम, 1923, औद्योगिक विवाद अधिनियम, 1947मातृत्व लाभ अधिनियम, 197, कार्यस्थल पर महिलाओं का यौन उत्पीडन) रोकथाम, निषेध और निवारण (अधिनियम, 2013)

या उसमें किए गए किसी प्रकार के संशोधन या इससे संबंधित अन्य कानून और समय-समय पर बनाए गए नियमों का पालन करेगा। संविदाकार निम्न के संबंध में भारतीय रिज़र्व बैंक के पक्ष में बीमा करवाएगा और उसे लागू रखेगा

The Contractor shall in respect of labour employed by him or his sub-contractor comply with or cause to be complied with the Bidder Labour Regulation in regard to all matters provided therein. The contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employers Liability Act, 1938. Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefit Act, 1970, Sexual Harassment of Women at work place (Prevention, Prohibition and Redressal) Act, 2013, or any modification thereof or anyother law relating thereto and rules made there under from time to time. The Contractor shall indemnify and keep indemnified the RESERVE BANK OF INDIA against

- i. कार्य के निष्पादन से/दौरान होने वाली तीसरी पार्टी के नुकसान /व्यक्ति या संपत्ति को हुए नुकसान से उत्पन्न दावा Any claim arising out of third party loss / damage to life or property caused by / during execution of the work.
- ii. कार्य के निष्पादन के दौरान संविदाकार द्वारा काम पर लगाए गए कामगार के कारण हुए नुकसान/क्षिति से उत्पन्न दावा Any claim arising out of loss / damage to the workmen engaged by the contractor during execution of the work.
- iii. लागू पीएफ/श्रम कानूनों ,ईएसआई ,विनियमों आदि का अनुपालन न किए जाने के कारण उत्पन्न कोई दावा Any claim due to non-compliance of applicable PF / Labour laws, ESI Regulations etc.

संविदाकार अपनी लागत पर आईआरडीए अनुमोदित कार्यालय के साथ नियोक्ता और अपने नाम से संयुक्त बीमा पॉलिसी लेगें और उसकी रखरखाव की व्यवस्था भी करेंगे, जिसमें प्रथम पार्टी के रूप में नियोक्ता (क्षेत्रीय निदेशक, भारतीय रिज़र्व बैंक) होगा और इस संविदा के शुरू होने के समय ऐसे पॉलिसी/पॉलिसियों को नियोक्ता के पास जमा करेंगे।

- क) संविदा की कुल राशि के लिए पॉलिसी के स्टोरेज, निर्माण, परीक्षण और चालू (ई.ए.आर पॉलिसी) करने के लिए।
- ख) कामगार क्षतिपूर्ति पॉलिसी।
- ग) निम्नानुसार सीमा निर्धारित करते हुए तीसरी पार्टी दायित्व पॉलिसी
- घ) रु.10,00,000/- प्रति वर्ष
- ङ) रु.2,00,000/- प्रति घटना

The Contractor shall at his own expense, arrange to effect and maintain (until the virtual completion of the contract) with an IRDA approved office the following insurance policies in the joint name of employer and himself with the employer being first (Regional Director, Reserve Bank of India) and deposit such policy or policies with the employer from time during the currency of this contract.

- a) Storage, erection, testing and commissioning policy (E.A.R. policy) for the total amount of contract.
- b) Workmen compensation policy.
- c) Third party liability policy with the limits as under.
- d) Rs.10,00,000/- per annum
- e) Rs.2,00,000/- per occurrence

संविदाकार संविदा श्रम) विनियमन और उन्मूलन (अधिनियम 1970 का पालन करेगा । अंतिम बिल का भुगतान किए जाने से पूर्व संविदाकार इस आशय का प्रमाणपत्र प्रस्तुत करेगा कि उसने कार्य को पूरा करने के लिए उसके द्वारा काम पर लगाए गए सभी कामगारों को वास्तव में सभी देयों का भुगतान कर दिया है और इस भुगतान की दर न्यूनतम मजदूरी अधिनियम 1949 के अंतर्गत निर्धारित दर से कम नहीं है और संविदा पर लगाए गए श्रमिकों के लिए आवश्यक सुविधाएं उपलब्ध करवाने में सीएलआरए अधिनियम के प्रावधानों का अनुपालन किया है।

The Contractor shall comply with the provisions of Contract Labour (Regulation & Abolition) Act, 1970. Before release of final bill, the contractor shall submit a certificate to the effect that he has actually paid the entire dues to the labourers of all descriptions engaged by him, for completion of this work at the rate, which is not less than the one prescribed under the Minimum Wages Act, 1949 and has complied with the provisions of CLRA Act with regard to providing the essential amenities to the Contract Labour.

संविदाकार बैंक परिसर में काम पर लगाए गए अपने कर्मचारियों की पूरी और अद्यतन सूची उपलब्ध करवाएगा।

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

14. संविदाकार इस करार के संबंध में अपने संविदात्मक दायित्वों को पूरा करने के दौरान ठेकदार को मिलने वाली कोई भी जानकारी, सामग्री तथा बैंक के बुनियादी ढांचा/सिस्टम/उपस्करों आदि के संबंध में मिलने वाली जानकारी का प्रत्यक्ष या अप्रत्यक्ष रूप से प्रकटीकरण किसी अन्य पक्षकार को नहीं करेगा तथा हमेशा इसे अतिगोपनीय बनाए रखेगा। लागू कानून का अनुपालन करने या संविदा के अधीन अपने दायित्वों को पूरा करने के लिए आवश्यक होने की स्थिति को छोड़कर संविदाकार इस संविदा के ब्यौरों को निजी दायरे में और गोपनीय रखेगा। बैंक की पूर्व लिखित अनुमित के बिना संविदाकार किसी व्यापारिक या तकनीकी पेपर में या अन्यत्र कार्य के विवरण को न तो प्रकाशित करेगा, न ही प्रकाशन की अनुमित देगा और न ही इसका प्रकटीकरण करेगा। किसी गोपनीय जानकारी के प्रकटीकरण के परिणामस्वरूप बैंक को हुई हानि के लिए संविदाकार बैंक को क्षतिपूर्ति करेगा। उपर्युक्त शर्तों का पालन न करना संविदाकार द्वारा संविदा भंग माना जाएगा और बैंक हुई क्षति का दावा करने तथा कानूनी उपाय करने का हकदार होगा।

इस करार के अधीन गोपनीय जानकारी का प्रकटीकरण न किए जाने के दायित्व को सुनिश्चित करने के लिए संविदाकार अपने कर्मचारियों के संबंध में सभी उचित कार्रवाई करेगा। प्रकटीकरण न करने और गोपनीयता के संबंध में संविदाकार का दायित्व इस करार के समाप्त होने या किसी भी कारण से समाप्त किए जाने तक बना रहेगा।

The Contractor shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructure/systems/equipment 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 this Agreement is 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.

- 15. कि इस संविदा के विभिन्न भागों को संविदाकार द्वारा पढ़ और पूरी तरह से समझ लिया है। That the several parts of this Contract have been read by the Contractor and fully understood by the Contractor.
- 16. एमएमसी अवधि के पहले वर्ष की एएमसी राशि रु. /- (18% जीएसटी सहित) है। The AMC amount for 1st year AMC period is Rs, /- (Inclusive of 18 % GST).
- 17. बैंक गारंटी: कमीशनिंग की तारीख से और अंतिम बिल प्रस्तुत करते समय निविदा में निर्धारित किए अनुसार बैंक को कार्य सौंपने तक दोष देयता अविध के शर्तों और दायित्वों की यथा पूर्ति के लिए निविदाकर्ता संविदा मूल्य का 10 % प्रतिभूति के रूप में बैंक गारंटी अलग रूप से प्रस्तुत करेगा। बैंक गारंटी परियोजना के प्रत्यक्ष पूर्ति के तारीख से पाँच वर्ष के लिए वैध होना चाहिए। पांच वर्ष के बाद, बैंक गारंटी के मूल्य को प्रारंभिक मूल्य के पचास प्रतिशत (50%) तक कम कर दिए जाएंगे और अगले पाच वर्ष के लिए वहीं मूल्य रहेगा।

The tenderer shall furnish a separate Bank guarantee of 10% of the contract value as Security for due fulfilment of terms and obligation of defects liability period from the date of commissioning and handing over of the works as specified in the tender to the Bank at the time of submission of final bill. The Bank Guarantee must be valid for five years from the date of virtual completion of the project. After five years, the amount of Bank guarantee will be reduced by fifty percent (50%) of initial value and shall remain valid for next five years.

18. एएमसी का कार्यक्षेत्रः

निविदाकर्ता ने मात्र अनुसूची के अनुसार संपूर्ण प्रणाली के व्यापक रखरखाव सेवा के लिए दर

कोट किया है, जो दोष देयता अविध (डीएलपी) के एक वर्ष के बाद लागू होगा। इस दर में उपर्युक्त कार्य करने वाले कामगारों के बीमा का प्रभार शामिल होगा और बीओक्यू में संबंधित कॉलम में रखरखाव के लिए जीएसटी कोट किए जाएंगे। इसकी अविध द्वैमासिक अथवा मौसम परिस्थिति के अनुरूप उससे पहले होगा। सेवा अविध के दौरान व्यापक वार्षिक रखरखाव सेवा के लिए प्रभार में सभी आवश्यक स्पेयरों, उपभोग्य सामग्री आदि प्रणाली के किसी भी भाग को बदलना भी शामिल होगा। एएमसी अविध के दौरान प्रणाली/सब-एस्सेब्लीस में पाए गए किसी भी दोष, 30 को संविदाकार द्वारा बैंक से अतिरिक्त लागत लिए बिना सुधारना / बदलना होगा।

Scope of Work for AMC:

The tenderer quoted rate for comprehensive annual maintenance service of complete system as per schedule of quantities which will be applicable after one year 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 for maintenance shall be quoted in respective column in the BOQ. The system shall be inspected, upkeep/serviced periodically. The periodicity shall be bi-monthly or earlier depending upon the weather conditions. The charges for comprehensive annual maintenance service shall include replacement of any part of the system, including all required spares, consumables 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.

19. सीएएमसी के दौरान सुधार में देरी के लिए दंड:

व्यापक वार्षिक रखरखाव सेवा अविध (डीएलपी अविध के बाद) के दौरान, प्रणाली में किसी प्रकार के दोष के बारे में सूचना प्राप्त होने के 2 दिनों के भीतर सुधारना चाहिए। अतः सभी लागत को ध्यान में रखते हुए, निकटतम सेवा स्टेशन से यात्रा लागत सिहत कोट किए गए दर में शामिल होना चाहिए। उपर्युक्त अनुसार यदि एएमसी अविध के दौरान 2 दिनों की अविध के भीतर यदि प्रणाली में दोष को सुधारा नहीं जाता तो प्रतिदिन रु.250/- से वार्षिक रखरखाव प्रभाव के अधिकतम 50% तक दंड लगाया जाएगा।डीएलपी के दौरान लगाया गया कोई भी दंड संविदाकार को देय राशि से अथवा बैंक गारंटी से वसूल किए जाएंगे।

Penalty for delay in rectification during CAMC:

During the comprehensive annual maintenance service period (after DLP period), any fault in the system shall be rectified within 2 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.250/- 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 AMC period as stated above. Any penalty during the DLP shall be recovered from any dues payable to the contractor or invoke from the bank guarantee.

20. संविदाकार/ ओईएम यह वचनपत्र देंगे कि वे दोष देयता अवधि की समाप्ति की तारीख से कम-से-कम 9 वर्ष की अवधि के लिए डीजी सेट के लिए पुर्जे और सहायता और रखरखाव उपलब्ध कराएंगे। डीएलपी अवधि के 1 वर्ष के बाद संविदा दर का नवीकरण वार्षिक रूप से किया जाएगा, जो निम्नलिखित के अनुसार केवल मूल्य अंतर खंड के अधीन होगा।

The contractor/OEM shall furnish an undertaking that they will provide spares and support and maintain the solar system for a minimum period of 9 years from the date of expiry of the defect liability period. After 1-year DLP and the contract rate will be renewed annually subject to only price variation clause as specified below.

21. भुगतान शर्तें और नवीकरण फोर्मूलाः

सीएएमसी अविध के दौरान संतोपजनक सेवा प्रदान करने पर द्वैमासिक आधार पर भुगतान किया जाएगा। एक वर्ष की वारंटी के बाद एक वर्ष के प्रारंभिक वार्षिक सेवा संविदा अविध के बाद सेवा संविदा को अतिरिक्त 8 वर्ष के लिए नवीकृत किया जाएगा। संविदा को नवीकृत करते समय नया संविदा मूल्य निम्नलिखित फोर्मूला के आधार पर निर्धारित किए जाएंगें-

Ac =Ap [(15+60x(EPIc/EPIp)+25x(CPIc/CPIp)]x100	
Ac	वर्तमान वर्ष का संविदा मूल्य
A _P	पिछले वर्ष का संविदा मूल्य
EPIc	वर्तमान वर्ष के लिए संविदा शुरू होने से छह महीने पहले का इलक्ट्रिकल उत्पादों का थोक कीमत सूचकांक
EPI _P	पिछले वर्ष के लिए संविदा शुरू होने से छह महीने पहले का इलक्ट्रिकल उत्पादों का थोक कीमत सूचकांक
CPIc	वर्तमान वर्ष के लिए संविदा शुरू होने से छह महीने पहले का औद्योगिकी कामगारों के लिए उपभोक्ता मूल्य सूचकांक (अखिल भारतीय औसत)
CPIP	पिछले वर्ष के लिए संविदा शुरू होने से छह महीने पहले का औद्योगिकी कामगारों के लिए उपभोक्ता मूल्य सूचकांक (अखिल भारतीय औसत)

Payment terms and renewal formula:

The payment during the CAMC period shall be made on half yearly basis

on rendering satisfactory service bi-monthly .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:

A _C =A _F	$A_C = A_P [(15+60x(EPI_C/EPI_P)+25x(CPI_C/CPI_P)]x100$		
Ac	The contract amount for the current year.		
A _P	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.		
EPI _P	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.		

22. पूरा न होने पर हर्जानाः यदि संविदाकार, संविदा में निर्धारित समाप्ति अविध के भीतर कार्य पूरा नहीं करते हैं तो कार्य आदेश के 0.25% मूल्य से लेकर अधिकतम संविदात्मक मूल्य के 10% तक प्रति सप्ताह की शर्त पर परिनिर्धारित हर्जाने की कटौती की जाएगी।

Damages for non-completion: If the Contractor fails to complete the works within tender specified completion period, 0.25 % of the value of work order will be deducted per week subject to a maximum of 10% of the contract amount as liquidated damages.

नियोक्त और संविदाकार इस बारे में साक्ष्य स्वरूप अपने-अपने हस्ताक्षर किए और इसकी दो प्रतियाँ उक्त दिन और वर्ष को तैयार की गईं।

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 hereinabove written. यदि संविदाकार एक साझेदारी फ़र्म या एक व्यक्ति हो If the contractor is a partnership or an individual. नियोक्ता और संविदाकार इस बारे में साक्ष्य स्वरूप अपने-अपने अधिकृत हस्ताक्षरकर्ताओं के माध्यम से निष्पादित किए और संविदाकार ने इसकी दोनों प्रतियों पर अपनी सामान्य मुहर लगाई इसकी दो प्रतियों पर उसकी ओर से इन्हें उक्त दिन और वर्ष को निष्पादित किया गया।

यदि संविदाकार एक कंपनी है तो 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 duplicate/ has caused these presents and the said two duplicate hereof to be executed on its behalf, the day and year first hereinabove written.

हस्ताक्षर खंड Signature Clause भारतीय रिज़र्व बैंक की ओर से हस्ताक्षरित एवं सुपुर्द SIGNED AND DELIVERED by the Reserve Bank of India by the hand of श्री / Shri

(नाम एवं पदनाम (/ (Name and designation)

इनकी उपस्थिति में हस्ताक्षर किये गए / In the presence of

(1)

पता / Address

(2)

पता / Address

साक्षी / Witness

SIGNED AND DELIVERED by इनकी उपस्थिति में हस्ताक्षर किये गए / In the presence of (1)

पता / Address

(2)

पता / Address

यदि पार्टी भागीदारी फर्म या वैयक्तिक फर्म हो तो सभी अथवा सभी भागीदारों की ओर से हस्ताक्षर किये जाने चाहिए।

If the party is partnership firm or an individual should be signed by all or on behalf of all the partners.

साक्षी / Witness

THE COMMON SEAL OF

निम्नलिखित की उपस्थिति में दिनांक ------ को संपन्न निदेशक बोर्ड की बैठक में पारित संकल्प के अनुसरण में इस पर ----- की कॉमन मुहर लगाई गई है।

Was hereunto affixed pursuant to the resolutions passed by its Board of Directors at the meeting held on in the presence of

- (1)
- (2)

निदेशक, जिन्होंने निम्नलिखित की मौजूदगी में इसके प्रमाणस् वरूप इन दस्तावेजों पर हस्ताक्षर किए हैं। Directors who have signed these presents in token thereof in the presence of

(1)

(2)

विधिवत गठित अटर्नी एवं श्री

द्वारा हस्ताक्षरित एवं सुर्पुद SIGNED AND DELIVERED BY the Contractor by the hand of Shri

and duly constituted attorney.

यदि निविदाकार उसके कॉमन मुहर के अंतर्गत हस्ताक्षर करता है तो हस्ताक्षर खंड संस्था के अन्तर्नियमों में दिए गए मुहर खंड से मेल खाने चाहिए। If the Contractor signs under its common seal, the signature clause should tally with the sealing clause in the Articles of Association.

यदि संविदाकार चाहे कंपनी के रूप में या वैयक्तिक रूप में मुख्तारनामा के अंतर्गत हस्ताक्षर करता हो तो the Contractor lf is signing by hand of power of Attorney, whether a company or individual.

खंड 2 / Section-II

व्यावसायिक शर्तें /Commercial Conditions

1. E-tenders are invited from Original Equipment Manufacturers (OEM) or System Integrators for the work of Design, Supply, installation, testing and commissioning of 45kWp Grid Interactive SPV based Solar Power System at Bank's residential staff quarters at Besant Nagar, Chennai. E-tenders comprising duly filled in details of both Part I and Part II specifications of the tender should be uploaded in MSTC website under RBI portal not later than 15:00 Hrs of September 15, 2023.

Only those OEMs/ contractors who have minimum 5 years' experience (works completed on or before June 30, 2018) in the field of undertaking similar works viz Supply, Installation, Testing and Commissioning of Grid Interactive SPV based Solar Power System of capacity 45 KWp (minimum) or more for the office buildings/commercial premises/industrial houses and have, during the last 5 years (works completed on or after June 30, 2018), executed successfully similar works individually costing as under

(a) Three works each costing not less than 40% of Rs 33.50 Lakh

Or

(b) Two works each costing not less than 50% of Rs 33.50 Lakh

Or

(c) One work costing not less than 80% of Rs 33.50 Lakh

and

(d) Have a minimum yearly turn over of 100% of the Rs 33.50 Lakh during the last 3 years

and

(e) Have a service set up in Chennai for rendering service after sales. (address proof to be attached)

All the intending tenderers are advised to upload the documentary evidents for the above pre-qualification requirements.

Tenderers should upload the following documents in respect of fulfilling their eligibility with **suitable file names as indicated**.

- a) Copy of detailed work order indicating scope and value of works for indicating the experience including work completion certificate.
- b) List of completed works with all the details as in the format of Annexure 'A'. along with Supporting documents like Work order, completion certificate and TDS if applicable
- c) Completion certificate obtained from the clients in prescribed format as per annexure 'B' for qualifying works
- d) Proof of remittance of EMD

- e) Banker's Certificate as per Annexure 'C'
- f) Audited financial statement for turnover for last 3 years (File name eg: FS1, FS2 etc.)
- g) Details of service setup- In the format of Annexure 'D'
- h) Details of technical deviations proposed As per Annexure 'E'
- i) The particulars/Catalogues and the names of manufacturers of specified item.
- j) Details of Bankers as per Annexure 'F'
- k) Copy of Power of Attorney as per Annexure 'G'
- I) Duly filled and Signed NEFT Mandate form as per **Annexure 'K'**
- m) Escalation matrix as per Annexure 'L'
- n) Schedule of technical information as per Annexure 'M'
- o) Technical details of proposed system as per Annexure 'N'
- p) Guaranteed Energy generation for 25 years as per Annexure 'O'
- q) Undertaking from Tenderer for maintenance support as per Annexure 'P'
- r) Undertaking by Original Equipment Manufacturer as per Annexure 'Q'
- s) Declaration of Country of Origin as per Annexure 'R'
- t) Factory Acceptance Test as per Annexure 'S'
- u) Any other information relevant to the proposed work

Note (Regarding client certificate):

- In respect of Government Departments/Public sector Undertakings the certificate should be signed by the concerned Executive Engineer or an officer in an equivalent or higher rank.
- In respect of Departments other than Government Departments/Public sector Undertakings apart from the certificates mentioned above the TDS certificates matching with the payments related to the work executed shall also be enclosed.

A tender submitted by a firm who is found to be not satisfying the above criteria will be liable for rejection.

- 2. All the intending tenderers are requested to visit the site (Besant Nagar) residential quarter before quoting the prices.
- 3. Tenderers are required to submit the details of the works carried out by them during last 5 years along with the name and contact No. of the users of the equipment in the enclosed format.
- 4. A tender submitted by a firm who is found to be not submitting the above details will be rejected.
- 5. Tenders shall be submitted in two parts viz. Part I containing prequalification criteria, technical and commercial details of the offer and Part II containing prices only latest by 15:00 Hrs on September 15, 2023. Part I will be opened at 15:30 Hrs on September 15, 2023. The technical and commercial details of those tenderers who do not qualify the requirements of pre-

qualification criteria will not be considered for evaluation. Part II bid of only those vendors who qualify the requirements of technical and commercial conditions/details will be considered for opening. Opening of Part II will be intimated to the qualified vendors.

- 6. On receipt of intimation from the Bank of the acceptance of his / their 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 Bank of a 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.
- 7. 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 made good in cash the amount so deducted.

8. Part I – Technical & Commercial

Part I shall contain the un-priced tender consisting of complete technical specification including drawings 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.

Part I of the tender shall form EMD and the following:

- Power of Attorney/authorisation with the seal of the company/firm in the name of the person signing the tender documents.
- List of deviation, if any, in commercial/technical specification.
- Detailed proposed layout drawing and full equipment details.
- A letter from the OEM, authorising the bidder to participate in the tender along with a copy of the agreement with the OEM as regards implementation of similar projects in India and their after sales service
- Guaranteed DC power generation capacity of the entire system in KWp
- 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 equipments / products as contained under the manufacturer's catalogue / product brochures vis-a-vis those given under the specifications contained under this tender document, the specifications and dimensions given in this tender document shall prevail.

- 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.
- 10. Product support for twenty-five (25) years shall be given. Tenderer shall specifically indicate the product support offered against this tender & submit an undertaking in this regard. (Annex. O & P)
- 11. The tenderer should have maintenance set-up at Chennai. Address & telephone / fax nos. of maintenance set-up shall be indicated.
- 12. Technical data sheet as given under Annexure-N shall be filled up giving full information.
- 13. Other Certificates / Declarations as per Annexures enclosed to be submitted.
- 14. 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 shall be uploaded.
- 15. The Tenderers are advised to visit the site of installation and acquaint themselves of the site conditions before tendering.
- 16. The tenderers are advised to submit the tender based strictly on the General Conditions of the Contract and Technical Specifications contained in the tender documents, and not to stipulate any deviations. If acceptance of the terms and conditions given in the tender documents has any price implications, the same should be considered and included in the quoted price. A tender containing deviation from the terms and conditions is liable for rejection.
- 17. The tenderers shall submit full details of the patent, trade mark, 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.
- 18. All information, correspondence letters shall be addressed to Regional Director, Reserve Bank of India, Estate Department, Chennai.
- 19. No request for any change in rate or conditions after the opening of the part II of the tender will be entertained.

- 20. 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.
- 21. The technical and commercial details of those tenderers who do not qualify the requirements of pre-qualification criteria will not be considered for evaluation. Part II bid of only those vendors who qualify the requirements of technical and commercial conditions/details will be considered for opening. Opening of Part II will be intimated to the qualified vendors.
- 22. The scope of work shall include the following:
 - Design and Delivery of all equipment materials for the captioned work to Reserve Bank staff quarters at Besant Nagar, Chennai 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 statuary authorities for connection to the grid.
- 23. The tenderer should indicate the complete description of the working of the System/subsystems and their power requirements with all relevant Brochures / literature etc. in addition to those called for in the Technical Specifications.
- 24. The Tenderer shall carefully check the specifications and shall satisfy himself that the equipment offered is suitable as per the Bank's Technical Specifications.
- 25. Tenderer shall supply all tools, plants, scaffolding, labour and consumables etc. as required for installation, testing and commissioning of the system.
- 26. The Bank is not bound to accept the lowest or any tender or to assign any reason for non-acceptance.
- 27. 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 tenders, even though the Bank may elect to modify/withdraw the tender.
- 28. The Reserve Bank of India reserves the right to accept or reject any or all the tenders, in full or in part, without assigning any reason therefore. The Bank also reserves the right to accept the tender of any firm.

- 29. Vendors are advised to verify website for corrigendum, if any before submitting the bid. No clarification will be entertained after September 01, 2023.
- 30. Vendors are requested to quote base rate for Design, Supply, Installation, Testing and Commissioning of the system without G.S.T and the same will be added automatically by the system.
- 31. Thus the final total amount shown in the system including G.S.T and other applicable taxes will be the final bid amount. No change in quoted rates will be accepted after opening of the tender.
- 32. Earnest Money Deposit for a sum of **Rs.67,000**/- (Rupees Sixty seven thousand only) shall be remitted to Bank Account of Reserve Bank of India on or before **14.00 Hrs on September 15 ,2023**. The account details for NEFT / RTGS transactions are as follows.

Beneficiary Name: RBI CHENNAI

IFSC: RBIS0CNPA01 Account No: 186003001

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 estatechennai@rbi.org.in.

EMD shall also be submitted in the form of Bank Guarantee (**Annexure H**) at Estate Department, Reserve Bank of India, Chennai - 600001. A tender which is not accompanied by such EMD will not be considered.

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

- 33. The tenders shall be valid for a period of 90 days from the date of **opening of Part I of the tender**.
- 34. The rates quoted shall be inclusive of transport, packing, forwarding, insurance etc. and shall be for the complete work duly installed and commissioned at site. The prices quoted shall remain firm for the entire period of contract and shall not be subjected to any variations in the foreign exchange or variations of any other taxes, levies, duties etc. No import license will be furnished by the Bank. The tenderers shall make their own arrangement for import of any part or components, if any, required for completion of the work. Tenderer should have GST registration number. Tenderers must quote their rates including GST levied by the Central Government and State Government. The Bank is not responsible for payment of GST for the service rendered by the contractor. It is the responsibility of the contractor to pay the GST to the tax authority.

- 35. The entire work of supply, installation, testing and commissioning of the system shall be completed within a period of 03 Months from the 10th day of date of issue of work order.
- 36. Damages for non-completion: If the Contractor fails to complete the works within tender specified completion period, 0.25 % of the value of work order will be deducted per week subject to a maximum of 10% of the contract amount as liquidated damges.
- **37.** The tenderers shall indicate details of the service centre at Chennai, the staff strength, contact numbers, availability of spares for the system and escalation matrix.
- 38. The tenderer shall furnish a separate Bank guarantee of 10% of the contract value as Security for due fulfilment of terms and obligation of defects liability period from the date of commissioning and handing over of the system as specified in the tender to the Bank at the time of submission of final bill. The Bank Guarantee must be valid for five years from the date of virtual completion of the project. After five years, the amount of Bank guarantee will be reduced by fifty percent (50%) of initial value and shall remain valid for next five years

39. Warranty/Defect Liability period:

- a. The entire system shall be warranted against any manufacturing/design/ installation defects etc for a minimum period of one year from the date of handing over. 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 system 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. 250/- 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.

- d. 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.
- 40. Penalty for Reduced Generation during initial 5 years: As mentioned under the foregoing paragraphs, the successful tenderer is required to commit a 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:

Actual output for the year under reference = A (KWH)

Guaranteed output of the system as per the contract = B (KWh)

Compensation to be paid to the Bank in case of reduced generation (Rs) = (B-A)X(Tariff X 2)

41. Comprehensive Annual Maintenance Contract (CAMC) after DLP period

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 one year 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 for maintenance shall be quoted in respective column in the BOQ.

- 42. The system shall be inspected, upkeep/serviced periodically. The periodicity shall be bi-monthly or earlier depending upon the weather conditions.
- 43. The charges for comprehensive annual maintenance service shall include replacement of any part of the system, including all required spares, consumables 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.
- 44. Penalty for delay in rectification during CAMC:

During the comprehensive annual maintenance service period (after DLP period), any fault in the system shall be rectified within 2 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.250/- 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 AMC period as stated above. Any penalty during the DLP shall be recovered from any dues payable to the contractor or invoke from the bank guarantee.

45. Payment of service charges during comprehensive annual maintenance service (CAMC):

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

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 =Ar	$A_{C} = A_{P} [(15 + \frac{60}{60}x(EPI_{C}/EPI_{P}) + 25x(CPI_{C}/CPI_{P})]x100$	
Ac	The contract amount for the current year.	
A _P	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.	
EPI _P	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	
CPIP	Consumer Price Index for Industrial Workers (All India Average) 6 months prior to the commencement date of contract for the previous	

The successful tenderer shall enter into an agreement for comprehensive annual maintenance contract of the system with the Bank.

46. Packing and Dispatch:

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 Reserve Bank of India Staff Quarters, Besant Nagar, Chennai.

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.

47. Sufficiency of Schedule of Quantities:

The Contractor shall be deemed to have satisfied himself before tendering

as to the correctness and sufficiency of his 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.

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.

48. Language

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

49. Right to Accept Part Tender

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

50. Evaluation of tenders:

Tenders will be evaluated on the basis of capital cost of the system and taking into account the effect of comprehensive annual maintenane charges (AMC) for 9 years. Tenders will , therefore, be evaluated based on the Total Owning Cost for 10 years which will be arrived 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)	i choa or contract	10 years from the date of handing over of the system.
(d)		Half yearly payment after satisfactory completion of service (bi-monthly)

51. Minimum Base Rate for Comprehensive AMC:

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

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

52. Pre-dispatch Inspection:

Before dispatching the equipment to site, the solar panels and inverter, will be inspected at the manufacturer's works, if required, at the discretion of the Bank and tested for various parameters by the Bank's Engineer and then cleared for shipment. This will however, not in any way 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.

- 53. Drawings: All required drawings for equipment lay out viz: 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.
- 54. 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.
- 55. The tenderers are requested to examine the drawings, inspect the site of the work, and acquaint themselves with all local conditions, means of access to the work, nature of the work etc. before submission of tender.
- 56. 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 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 in order to show the aggregate value of the entire tender.

- 57. The rates quoted in the 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 centering, 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.
- 58. 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 tender amount, subject to such variations as are provided for herein.
- 59. 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.
- 60. Minimum wages/ Gratuity act / contract labour Act to the workmen: The contractor shall ensure that minimum wages/ gratuity as per statutory requirement are paid to all the workmen.
- 61. Labour License: The contractor shall adhere to various provisions of the Contract Labour (Regulation & Abolition) Act 1970, if applicable under the said contract, and fulfil all the statutory requirements. 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.

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.

62. <u>Terms of Payment:</u>

The following terms of payment, subject to statuary deductions, will apply to the contract:

- a. 60% of the quoted rate against receipt of the material at site o pro-rata basis and on submission of the following documents:
- i) Manufacturer's Inspection and Test Certificates
- ii) 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.
- iii) Policies of insurance covering all the risks during transit, storage, installation, commissioning, testing and handing over including third party liabilities.
- b. Balance 30% of the quoted rate against erection of the system at site.
- c. Balance 10% of the quoted rate against testing, commissioning of the system with net metering facility including necessary approvals from TANGEDCO / CEIG and submission of BG as per clause 37.
- 63. Any statutory payments in connection with obtaining necessary approvals like inspection charges for commissioning, obtaining net metering and other related works shall be necessary made by the contractor first, immediately on demand by the Statutory Authorities and the same amount shall be subsequently reimbursed at appropriate time by the Employer on production of original receipt to the Bank.
- 64. **Insurance:** The Contractor shall at his own expense, arrange to effect and maintain (until the virtual completion of the contract) with an IRDA approved office the following insurance policies in the joint name of employer and himself with the employer being first (Regional Director, Reserve Bank of India) and deposit such policy or policies with the employer from time during the currency of this contract.
 - a) Storage, erection, testing and commissioning policy (E.A.R. policy) for the total amount of contract.
 - b) Workmen compensation policy.
 - c) Third party liability policy with the limits as under.
 - d) Rs.10,00,000/- per annum
 - e) Rs.2,00,000/- per occurrence
- 65. The contractor shall submit a Bar Chart for completion of the work within the contractual completion period from the tenth day of letter of award of work. 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.
- 66. 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.

- 67. **Training:** The tenderer shall impart training, if any, to the Bank's Engineers/Technicians on the system before handing over the system without any charge to the Bank.
- 68. Agreement: The successful tenderer shall execute an agreement with the Bank on non- judicial stamp paper in the format enclosed within fourteen days of receipt of letter of acceptance. However, the issue of letter of acceptance by the Bank shall be construed as a binding contract, as though such an agreement has been executed and all the terms and conditions shall apply on this contract

Signature of the contractor	
Name of the firm	
Seal of the firm	
<u>Date</u>	

Section III

Safety Code

- 1. First aid appliances including adequate supply of sterilised dressings and cotton wool shall be provided in a readily accessible place.
- 2. An 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 work 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 shall not be 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 trench, whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
- 6. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing; minimum height shall be one metre.
- 7. No floor, roof or other part of the structure shall be so overloaded with debris of 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 eyeshields and gloves.
- 10. i) No paint containing lead or lead products shall be used except in the forms of paste or readymade paint.
 - ii) Suitable face masks shall 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.
- 11. Overalls shall be supplied by the Contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during the period of cessation of work.
- 12. Hoisting machines and tackle used in the works, including their attachments, anchorage and support shall be in perfect condition.
- 13. The ropes used in hoisting or lowering material or a means of suspension shall be of durable quality and adequate strength and free from defects.
- 14. The contractor shall provide all the safety gadgets to the workers for carrying out the work as per statutory norms.
- 15. During the work execution necessary fire safety measures shall also be taken.

Fire Safety

- 1. Cutting / drilling machine and other electrically operated equipment used at site shall be plugged into correctly rated electrical outlets.
- 2. Only ISI marked 3 pin plug and other appliances and equipment shall be used.
- 3. Electrical power cables/wires used shall not have any joints and shall be properly rated.
- 4. All electrical appliances i.e. welding, drilling, cutting machine etc. shall be safely and securely earthed to prevent leakage current while in operation.
- 5. 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.
- 6. Two buckets of water and sand shall be kept in an easily accessible area on the site.
- 7. Fire extinguishers recommended and issued by fire officers shall be kept on the site.
- 8. Used paint drums shall be stored in specified store only after closing them properly.
- 9. Personal protective equipment 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.
- 10. 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.
- 11. None of the passages near lift lobby and staircases shall be used for stacking / dumping any kind of materials/waste.
- 12. Both the staircase doors shall be normally kept closed.
- 13. None of the fire extinguishers shall be removed/shifted from its designated location.
- 14. Power supply shall be switched off from the mains when equipment is not in use.
- 15. 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.
- 16. Any debris generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.
- 17. Battery operated emergency light/torches shall be provided by the contractor to the workmen while working beyond office hours.
- 18. Power Supply should be tapped for use from RCCB / RCBO.

Section IV The Conditions herein before 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 Tender any sum, either as a percentage or otherwise, then net price of any item in their tender shall be the sum arrived at by adding to or deducting from the actual figures appearing in the 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 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 Design, supply, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar.

- 2. <u>Scope of Contract</u>: 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 tender. The Employer shall not be liable for payment of such variations until these statements are sanctioned by him.

3. The contractor shall prepare the line diagram, system configuration drawing and Lay out plan of the site for carrying out the work. 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. 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 be 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, licence fees, damages cost and charges of all and every sort that may be legally incurred in respect thereof.

- 6. <u>Setting out of work</u>: 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. <u>Dismissal of workmen</u>: 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 authorised by the Employer except the representatives of public authorities shall be allowed on the works at any time.
- 11. <u>Bank's Engineer</u>: 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. <u>Schedule of Quantities</u>: 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. <u>Sufficiency of Schedule of Quantities</u>: The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his 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. <u>Measurement of works</u>: 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 require.

All authorised 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 authorised 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 authorisation 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 authorised and shall be made in accordance with the following provisions.

- (a) (i) The net rates or prices in the original 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 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.
- 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 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 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.

The measurement and valuation in respect of the Contract shall be completed within the "period of final measurements" stated in the Appendix.

18. <u>Unfixed materials when taken into account to be the property of the Employer</u>

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 moneys due, or that may become due, to the Contractor.
- 20. <u>Defects after virtual completion</u>: Any defect, shrinkage, settlement or other fault which may appear within the "Defects Liability Period" stated in the Appendix hereto, or, if none stated them 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 clause 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 be 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. The Contractor shall at his own expense, arrange to effect and maintain (until the virtual completion of the contract) with an approved office the following insurance policy in the joint name of employer and himself with the employer being first (Principal) and deposit such policy or policies with the employer from time during the currency of this contract.

25. <u>Insurance</u>: The contractor shall, efore commencement of the work, insure the works at his cost and keep them insure 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 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 before commencement of the work. 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 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 en titled to such extension of time for completion as deems fit.

- 26. <u>Date of commencement and completion</u>: 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.
- 27. <u>Damages for non-completion</u>: 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.
- 28. <u>Delay and extension of time</u>: If in the opinion of the Employer the works be delayed
 - a) by force majure or
 - b) by reason of any exceptionally inclement weather or
 - c) by reason of proceedings taken or threatened by or dispute with adjoining or neighbouring owners or public authorities arising otherwise than through contractor's own default or
 - d) (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
- i) 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 endeavours to prevent delay and shall do all that may reasonably has required to the satisfaction of Bank to proceed with work.
- 29. 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.
- 30. 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 realised. 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.

31. <u>Termination of Contract by Contractor</u>: 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 Tender shall be followed or where the same may not apply valuation shall be made in accordance with Clause 17 hereof.

32. 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.

33. <u>Delayed Payment</u>: Any amounts payable by the Employer to the Contractor shall, if not paid within the 'period of honouring 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.

- 34. 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, 28 (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).
- 35. 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 there 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 mater on which a decision is taken by the Bank as above, except any of the expected matter the Contractor may within 28 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.

Right of technical scrutiny of final bill

36. 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.

Employer entitled to cover compensation paid to workman

37. 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.

Abandonment of works

38. If at any time after the acceptance of the 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.

Return of surplus materials

39. Notwithstanding anything to the contrary contained in any or all the clauses of this Contact, 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.

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

40. 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.

41. Non-disclosure Clause:-

The Contractor shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructure/systems/equipment 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.

42. Sexual Harassment of women at work place

- a) The contractor 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.
- b) Any complaint of sexual harassment from any aggrieved employee of the Service Provider against any employee of the Bank or any employee of any other firm working in 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 or other firm'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.

Section V

Special conditions

- 1. The workmen will not be allowed to stay within the premises.
- 2. The electric power required for the work can also be similarly drawn from the supply available at site free of cost.
- 3. Permission, if any, required from the local bodies shall be obtained by the Contractor.
- 4. The intending tenderer can obtain any clarifications regarding the Tender drawings, specifications etc. from the department on any Bank's working day
- 5. The tenderer may please note that, the work has to be carried out during the day time or as per the Bank's instructions. Therefore, the entire work involved shall be carried out with least disturbance to the staffs/occupants of the office/ colony and also day-to-day cleaning has to be done by the contractor. The wall/slab/column should be cut by chase cutter only
- 6. The contractor shall prepare a copy of **as done drawing** after completion of the work and shall submit along with the final bill.
- 7. The entire materials for the work shall be brought to the working area through the staircase and no freight lift will be available for lifting materials.
- 8. The debris/dust or any wastage generated out of the above work shall be cleaned as frequently as required and as instructed by the Bank's Engineer.
- 9. All dismantling work and work generating noise shall be done during the day time and holidays and day time work shall have to be done on restricted hours. Contractor has to made availability of supply during the Evening & night time. Contractor shall take into account the above facts while quoting the rates.
- 10. The tenderer shall remove all the debris collected at site (from the Bank's premises) on everyday basis. The staircase and passages used by the laborers shall be cleaned properly, as per the entire satisfaction of Bank's Engineers.
- 11. The contractor shall depute qualified supervisor during execution of the work. No work shall be carried out at site in unsupervised manner.
- 12. The tenderer shall use only approved brands of materials.

Section VI Appendix Hereinbefore Referred

1.	Defects liability Period	12 months from the date of issue of virtual completion certificate.
2.	Period of final measurement	1 month from the date of final commissioning.
3.	Date of commencement	10 th day from the award of work order.
4.	Period of completion	03 months from the 10 th day of work order
5.	Liquidated Damages for delay in completing the work.	0.25 % of the cost of work executed per week subject to a maximum of 10% of the contract amount.
6.	Value of work for Interim Certificate for running bill	As per the payment terms and conditions
7.	Period of honoring interim certificate	1 month
8.	Interest for delayed payment	3 percent per annum

Seal & Signature of Contractor

Date:

Section VII

Technical details of Solar Power System

7.1 Scope of Work

The extent of the work shown and specified hereunder is defined to include all labour, materials, equipment, and supervision required for the design, fabrication, supply, installation, testing and commissioning of the complete solar power generation system with grid connectivity. The system will be connected to LT service connections installed in Bank's Residential Staff quarters at Besant Nagar. Hence, provision of Net metering is in the scope of the vendor including liaison with TANGEDCO / CEIG for obtaining necessary approvals from TANGEDCO / CEIG (Kindly refer clause 63 of commercial conditions). The subsequent upkeep and maintenance is also the responsibility of the contractor.

Guaranteed annualized AC energy output of **1340 Kilo watt hour (KWH) per year per kWp** during the first ten years of operation with a tolerance of 10% of total annual generation (considering the weather conditions in Chennai) during the first ten 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) along with Power Conditioning Units (PCUs), as required and specified.
- 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 galvanized steel and mounting structure shall be of Non-invasive ballast type. Any sort of penetration of roof to be avoided. The minimum clearance of the structure from the roof level should be in between 150-300 mm to allow ventilation for cooling, also ease of cleaning and maintenance of panels as well as cleaning of terrace. The structures should be suitably loaded on removable concrete ballast made of pre-fabricated PCC (1:1:2), M25. Material test certificate from NABL accredited laboratory shall be submitted by the contractor for the design compressive strength of pedestal for Bank's approval before delivery of these pedestals at site.
- c) Design of structure supporting the SPV shall be certified /vetted by a recognized Govt. Engineering College viz. IIT / NIT / University etc. and submitted for Bank's approval before taking up the structure and foundation works. The bidder should submit the array layout drawings to Bank before start of work at site.

- d) 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. The capacity of the inverter should not be less than 20KW, 20KW and 5 KW respectively.
- e) Supply and laying of all power (AC & DC) and control cables (Make: POLYCAB/FINOLEX/RR KABE) on prefabricated GI cable trays / PVC Pipes including supply of cable trays / pvc pipes, their installation, hangers, supports, cable terminations and all fixing accessories.
- f) **Earthing:** Plate Earthing shall be provided as per IS 3043: 2018 with minimum three Nos. per power plant. The earthing conductor shall be of GI flat strips with size not less than 25 X 3 mm with necessary saddles and clamps including, cutting of roads / paved area & making good the damages as in original shape. The testing point shall be provided for every pit and the firm shall measure the earth pit resistance for those provided by them and test report shall be submitted to the Bank. Earth resistance should be as low as possible and shall never be higher than 5 ohms.
- g) **Scaffolding:** Scaffolding required for laying of cables, earth strips etc. shall be provided by the contractor without any additional cost.
- h) 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.
- i) The PV modules shall be installed with the necessary tilt with the most effective orientation.
- i) All related & required civil works will be the responsibility of successful tenderer.
- k) Solar System capacity shall be demonstrated to the Bank's Engineer.
- I) Onsite training to RBI Engineers and Workmen for proper operation, maintenance and trouble shooting.

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.

7.2 MINIMAL TECHNICAL REQUIREMENTS / STANDARDS FOR SPV ITEMS / SYSTEMS

7.2.1 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: Mono PERC (Passivated Emitter and rear cell) Silicon Terrestrial PV Modules: IEC 61215 / IS14286.

- i) The Solar PV modules should be supplied from the list of manufacturers and models of solar PV modules under ALMM order of Ministry of New and Renewable Energy (MNRE), Government of India, as on dated 01.08.2023 or updated afterwards.
- ii) 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 / IS61701.

7.3 RELEVENT STANDARD OF SYSTEM/ COMPONENTS/ITEMS

7.3.1 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		
items	Standard Description	Standard	
Power Conditioners / Inverters including		IEC 60068-2	
	Environmental Testing	(1,2,14,30) /	
		Equivalent BIS Std.	
	Efficiency	IEC 61683	
(Maximum peak power	Measurements		
transfer) MPPT and protections	Procedure of islanding	IEC 62116	
	prevention Measures		
	Electrical safety	IEC 60038- 2	
	standards		

PV modules	Ageing of PV modules	IEC 61215 - ED2 & 61730-1&2 / UL certified with MNRE (GoI) - SEC test certificate or from other accredited labs		
	Salt mist corrosion	IEC 61701:2011 / IS 61701		
Cables	General Test and Measuring method PVC insulated cables	IEC 60227 / IS 694 or Equivalent BIS standard		
Switches / Circuit Breakers / Connectors	General requirements connectors	IEC 60947 Part 1,II, III/ IS 60947 Part I,II,III		
Junction Boxes /Enclosures for Inverters/Charge Controllers/Luminaries	General Requirements	IP 65 (for outdoor) / IP 21(for indoor) as per IEC 529		

7.4. AUTHORISED TESTING LABORATORIES / CENTERS

- 7.4.1 The PV modules must be tested and approved by one of the IEC authorized test centres. Test certificates can be issued by any of the NABL / BIS Accredited Testing/Calibration Laboratories.
- 7.4.2 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.

7.5. IDENTIFICATION AND TRACEABILITY

Each PV module used in the solar power project must use a RF identification tag (RFID), which must contain the following information. The RFID 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, Im, Vm and field factor (FF) for the module
- vii) Unique Serial No. and Model No. of the module
- **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**. Drawings indicating the design of Solar Power Generation System proposed along with designs for structures / foundations for SPV array duly certified / vetted by a recognized Govt. Eng. College etc. shall be submitted to the Bank's Engineer, for approval, within Seven (7) 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) Itemized bill of material for complete SPV system covering all the components and associated accessories.
- **7.8 Testing of equipment/system:** 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.

7.8.1 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.

7.8.2 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.

7.9 TRAINING

The contractor shall include in his 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.

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 asunder:

7.10.1 Solar PV Modules:

- a) The solar photo-voltaic module of ≥520 Wp power output under STC to be provided with high efficiency of more than 18% (minimum) Mono PERC 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 as per the latest IS code 875 part 3 or minimum 180 km/h.It shall perform satisfactorily in relative humidity up to 95% and temperature between 10 deg C and 85 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 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 mounting structure must be Non-invasive ballast type and any sort of penetration of roof to be avoided.
- i) The minimum clearance of the structure from the roof level should be in between 150-300 mm to allow ventilation for cooling, also ease of cleaning and maintenance of panels as well as cleaning of terrace.

- j) The structures should be suitably loaded with removable concrete blocks made of Pre-fabricated PCC (1:1:2), M25 concrete mixture.
- k) The mounting structure should be of Fixed Type, Tilt angle suitable to site, Foundation PCC, Fixing type with SS 304 fastener with clamp fitted to provide rigidity to the structure.
- I) Galvanized Steel Structural must be considered for all type structural steel proposed for the power system.
- m) The array structure shall be grounded properly using earthing kit.
- n) 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. The capacity of the inverter should not be less than 20kW and 5 kW. It should conform to IEC61683 and must additionally conform to the relevant national/ international Electrical Safety Standards IEC20068-2. 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 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. When the mains power is off, the PCU should also get automatically off so that back-feeding to the grid is not possible.

h) Data Monitoring:

For online monitoring, a data logging system shall be provided and the same shall be fixed at a reachable height. Net / SIM based Data logging system shall be provided. The data storage facility has to be provided in the Inverter. The net charges will have to be borne by the installer till the completion of 10 year AMC period.

The software (Plant Manager & PC for remote monitoring through SIM/Net based Data Logging) and hardware except PC, 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
- 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 (Make: FINOLEX/POLYCAB/RR KABEL) and voltage rating of 650/1100V 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 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 a GI cable tray /PVC Pipes and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- d) 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 Instrumentation, measurement and monitoring:

Data Logging Provision for system monitoring, time and date stamped system data logs for analysis shall be made.

Metering and Instrumentation for display of systems parameters and status indication to be provided.

PV array energy production: Digital Energy Meters to log the actual value of AC/DC voltage, Current & Energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.2 accuracy class shall be provided.

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. Temperatures (C).
- j. Inverter Status.
- **7.10.7 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, PV stopping delay).

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

a) Earthing: The structure of the PV arrays shall 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 20947 part I, II & III,EN 50521f) Fuses to be provided to protect against short circuit conditions.
- f) Details of solar power system design and layout for all systems shall be submitted along with Technical bid (Part-I)
- **g)** All the components of the systems viz PV modules, Electronics, etc. should have type approval / test certificates **as per MNRE guidelines.**
- **h)** All components and materials used in the system should be of good quality & conform to the BIS / IEC standards / specifications, wherever available / applicable.
- i) Each system should have number plate with name & logo of the manufacturer and the month / year of installation.
- j) Operation and Maintenance / Instruction Manual (with Do's and Don'ts) to be provided with each system.
- **k)** Danger boards should be provided as and where necessary as per IE Act / /IE rules as amended up to date.

7.10.9 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 color-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.

Signature	&	Seal	of	the	firm

Date:



Estate department Chennai

Design, supply, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar.

Section - VIII Un-Priced Bid

Sr. No.	Description	Qty.
140.	Design, Supply of Solar photovoltaic (SPV) based grid interactive Solar Power Plants not less than the capacities specified below	
	2.The system shall have guaranteed annualized AC energy output of 1340 Kilo watt hour (KWH) per year per kWp during the first ten years of operation and as specified in the scope of work ,techincal specifications , terms and conditions mentioned in part I of the tender.	
	3. The rate shall include for all the material required including required quantities of SPV modules formed into arrays, their mounting arrangement, power conditioning units, required DC & AC distribution panels with surge protection units, earth stations with strip/cabling for connecting to the plant, data loggers for system performance monitoring through licensed software, metering safety arrangements, civil works, training etc. to provide a composite operational system.	
	4.The rate shall include for duties, levies, insurance, transportation, loading, unloading of the material etc	
	20 kWp Solar Power Plant	
1	Location : 1) M Block 2) V Block	2 Nos.
	,	
_	5 kWp Solar Power Plant	
2	Location : B block	1 Nos.

Sr. No.	Description	Qty.
	Installation of Rooftop Solar Power Plant Installation, Testing & Commissioning of the complete system as mentioned in item No.1 including providing earthing, mounting arrangement for SPV module /arrays, related civil works etc and provision of net metering including liaison with TANGEDCO / CEIG for obtaining necessary statutory approvals from TANGEDCO / CEIG as required and as specified to provide a complete operational system including training etc 1. The cost shall be considered for Plate type earthing stations (minimum 3 Nos. per power plant) as per IS 3043:2018 and 25 x 3 mm G.l. earth strip on wall/ ceiling /existing trenches/earth, of required length with necessary spacers and saddles. 2. The cost shall be considered for mounting structure of Non- invasive ballast type and any sort of penetration of roof to be avoided. The minimum clearance of the structure from the roof level should be in between 150-300 mm to allow ventilation for cooling, also ease of cleaning and maintenance of panels as well as cleaning of terrace. The structures should be suitably loaded with removable concrete blocks made of Pre- fabricated PCC (1:1:2), M25 concrete mixture.	
3	and other required drawings for approval from statutory bodies and for complying relevant CEIG specifications. 20 kWp Solar Power Plant Location: 1) M Block 2) V Block	2 Job
4	5 kWp Solar Power Plant Location : B block	1 Job
5.	Annual Maintenance Contract Charges Comprehensive annual maintenance charges for periodic maintenance/servicing of complete system including providing all spare parts/ tools/ consumables for servicing as required as per good engineering practice, recommendation(s) of the respective equipment manufacturer(s) and instructions of engineer-in-charge as per the scope of work in Part I of the tender. The rate shall be applicable after defect liability period/warranty of entire unit. The rate shall include for all the taxes, duties, levies, insurance, transportation etc. The quoted rates are applicable for the first year of AMC.	Per annum

Seal & Signature of the firm _	
-	

Date:

For SI. No. 1 to 4, please quote the rate per unit (a) excl. of GST and the system will automatically multiply with Quantity and GST by using following formulae and shows the final amount.

```
For SI.No 1 and 2 (a*Quantity*1.12)
For SI.No 3 and 4 (a*Quantity*1.18)
```

For SI. No. 5, please quote the rate per anum (a) excl. of GST together for all (2x20KWp and 1x5KWp) and the system will automatically multiply with GST & MF by using following formulae and shows the final amount (a*Quantity *1.18 *7.0476)

Grand Total = (Sl. No 1 + Sl. No 2 + Sl. No 3 + Sl. No 4 + Sl. No 5)

*The above format is given only for illustrative purpose. Tenderers are advised to fill-in their quoted rates only in the format available in the MSTC web portal. No indication of prices shall be furnished along with Part -1 documents. Submission of rates in the 'Unpriced bill of quantity' in physical/hard form and uploading the same in the portal along with Part-1 documents shall be liable to get disgualified

Annexure 'A' List of similar works executed during the last 5 years

Sr. No.	Name address the firm		Value of the work	Whether works completed in time or not (give date of start & and date of completion)	period as per work	

Signature & Seal of the	firm
Date:	

Annexure 'B'

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 behavior	Outstanding/Very Good/
		Good/Satisfactory/poor

Signature & Seal of the firm

Date:

Annexure - 'C'

Format of Banker's Certificate

CARE: To be uploaded along with Part-I of the tender

- Composition of the firm (whether Partnership/ Private Limited/ Proprietorship/ Public Limited.)
- 2. Name of the Proprietor/ Partners/ Directors of the firm.
- Turnover of the firm for the last 3 financial years (year wise).
 2023-2022
 2022-2021
 2021-2020
- 4. Credit facility/ Overdraft facility enjoyed by the firm.
- 5. Dealings
- 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.____ Lakhs.

(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

Annexure -'D'

Details of Service Set up at the place of work

S.No.	Details of service Centre
1	Address of Service Centre
2	Contact numbers
3	Staff strength
4	Whether essential spares parts of the system have been stocked

Signature	&	Seal	of	the	firm
------------------	---	------	----	-----	------

Date:

Annexure 'E'

Schedule of Technical Deviations if any

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

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

Signature & Seal of the firm
Date:

Annexure 'F'

Details of Bankers

The details of our bankers in the following format are uploaded.

Sr. No.	Name of Bank	Branch and its complete address	Name of the contact person	Telephone ,FAX number and e-mail IDs
1	2	3	4	5

Signature	&	Seal	of	the	firm
Date:					

Annexure 'G'

Format for Power of Attorney for signing of Application/proposal (On Non-Judicial Stamp Paper of appropriate value)

				(Name of the Bidde	er and
	_	-	=	ppoint and authoris (Nam	
residential addreand	ess of Power holding	of Attorney	holder) who i the	s presently employ position	yed with us of
do in our name connection with and commission Solar power pl submission of Department RB	e and on our or incidental oning (DSITC ant at Bank' all documen I, Chennai reg with RBI Cl	behalf, all to our tender) of 45 kWp s Staff Quarts and proepresenting	such acts, deer for Design, (2 X 20 kWp arters, Besant viding informations in all matt	eeds and things no supply, installation & 1 x 5kWp) Grid to Nagar including station / responses ters before RBI Clannection with our page 1.	ecessary in on, testing Interactive signing and to Estate hennai and
Pursuant to this	Power of At	torney and t	hat all acts, d	fully done by our sa eeds and things do have been done by	one by our
Note Power of Attorne Power of Attorne	•		•	arized	
Signature/(s) of	the Bidder				
Name/(s					
Stamp/Seal of the	ne Bidder				
`		•		able in the state, nature and author	

Annexure 'H'

Proforma for Bank Guarantee In Lieu Of Earnest Money Deposit

(To be	submitted on non-judicial stamp paper of appropriate value purchased in the
name	of the issuing Bank).
This d	eed of guarantee made this day of two thousand between
	(Name of Banker) having its registered office at (place) and one of its
local o	ffices at (hereinafter referred to as the Surety), and Reserve Bank Of India,
constit	tuted by the Reserve Bank of India Act, 1934, having its Central Office at Central
Office	Building, Shahid Bhagat Singh Road, Mumbai-400 001 INDIA (hereinafter
referre	ed to as the Bank).
WHER	REAS (Tenderer's name hereinafter referred to as 'Tenderer') a
Compa	any registered under and having its registered office at is bound
-	posit with the Bank by way of earnest money INR (INR
	only) in connection with its Tender for Design,
supply	y, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp
& 1 x	5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant
Nagar	, Chennai and the specifications and terms and conditions enclosed therein.
WHER	REAS the tenderer as per clause No Part 1 commercial conditions and
specia	Il conditions has agreed to furnish a Bank Guarantee valid up to
instead	d of deposit of earnest money in cash.
NOW '	THIS WITNESSETH:
1	That the Surety in consideration of the above Tender made by the Tenderer to
	the Bank hereby undertakes to guarantee payment on demand without demur
	to the Bank the said amount of INR (INR
	only) within one week from the date of receipt of the demand
	from the Bank on presentation of this deed of guarantee, which the Tenderer is
	bound to deposit with the Bank by way of earnest money in connection with his
	Tender.
2	This guarantee shall not be affected by any infirmity or irregularity on the part
	of the Tenderer or by the dissolution or any change in the constitution of the
	Bank, Tenderer or the Surety.
3	The Bank shall be eligible to make any claim under this guarantee if the
	Tenderer after submitting his Tender, rescinds from his offer or modifies the
	terms and conditions thereof in a manner not acceptable to the Bank or
	expresses his unwillingness to accept the order after the Bank has decided to
	place order with the Tenderer for the Design, supply, installation, testing and
comm	nissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar
power	r plant at Bank's Staff Quarters, Besant Nagar, Chennai. The Banks'
	decision in this regard shall be final and binding.

4	The Surety shall not and cannot revoke this guarantee during its currency except with previous consent of the Bank in writing.
5	Notwithstanding anything contained in the foregoing, the Surety's liability under the guarantee is restricted to INR (INR only).
6	This guarantee shall remain in force and effective up to and shall expire and become ineffective on intimation thereof being given to the Surety by the Bank in which event this guarantee shall stand discharged.
7	The Surety will make the payment pursuant to the demand notice issued by the Bank, notwithstanding any dispute that may exist or arise between the Tenderer and the Bank or any other person.
8	Any forbearance, act or omission on the part of the Bank in enforcing any of the conditions of the said tender or showing of any indulgence by the Bank to the 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.
9	Notwithstanding anything contained hereinabove, unless a demand or claim under this guarantee is made on the Surety in writing on or before, the Surety shall be discharged from all liabilities under guarantee thereafter.
10	The Surety has the power to issue this guarantee under its Memorandum and Articles of Association and the person who is hereby executing this deed has the necessary powers to do so under the Power of Attorney granted to him by the Surety.
	ED AND DELIVERED For and on behalf of or and on behalf of above named (Banker's Name and Seal)
	Manager er's seal)

Annexure 'J' Proforma of Bank Guarantee for Security Deposit

name	of the issuing bank) Date
Reserved 16, Ra	egional Director re Bank of India jaji salai ai- 600 001
Dear S	ir,
referre install 5kWp) Chenr and ot mutua form o	sideration of your agreeing to accept the security deposit of INR (INR only) furnish able to you by Messrs (hereinafter d to as "the Contractor") in terms of their contract with you for Design, supply, ation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar, ai, as per their Tender dated and your Special Conditions of Contract her tender documents relating thereto subject to the conditions and alterations by agreed upon the set forth or referred to in your Contract dated in the guarantee from us in the manner hereinafter contained, we (Name of the do hereby covenant and agree with you as follows: We undertake to indemnify you and keep you indemnified from time to time to
	the extent of INR 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 ______ 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 un cancelled 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 tender or showing of any indulgence by the Bank to the 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 favour 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

(For & on behalf of the above named Bank)

(Banker's Name & Seal)

BRANCH MANAGER

(Banker's Seal with Address)

Annexure 'K' -

1 Name of the Vendor

ECS/ NEFT MANDATE FORM (Mandate for receiving payments through ECS /NEFT from RBI, Chennai

All entries should be filled in neatly and legibly in Capital letters

2	Addre Vend	ess of the or								
3	Emai Vend	I ID of the or								
4	Phon	e Number						_		
5	Mobi	le Number	0							
6	Conta	act Person								
PA GS No	TIN			H	PAN Card Holde Name	r				
1	Name	e of the Bank								
2	Name	e of the Branch								
3		ess of the Branch								
4	digits	sode (11 s)								
5	digits									
6	(SB- -13)	account type 10/ CA-11 / CC								
7	Core Acco	Banking unt No.								

Please enclose the undernoted documents in support of the details mentioned above

- (1) a blank cancelled CTS-cheque
- (2) Photocopy of your PAN card
- (3) Proof of GST registration

Declaration

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected for reasons of incomplete or incorrect information, then I would not hold the Reserve Bank of India responsible.

Date	Signature of the Vendor/ Account holder
Place	_
	Vendor Common Seal

The Mail ID of Estate Department for Communication: estatechennai@rbi.org.in

Annexure 'L'

Escalation Matrix

Sl.no	Support Level	Name	Phone no.	E-mail ID
1	Level 1			
2	Level 2			
3	Level 3			
4	Level 4			

Signature & Seal of the firm	Signature	&	Seal	of	the	firm
------------------------------	-----------	---	------	----	-----	------

Date:

Annexure 'M'

Schedule of Technical Information

	Enclose a technical write up on the system design	
1	proposed for this project specifically indicating	
'	how the power generated from the solar energy	
	will be synchronized with the local grid.	
	Enclose a single line diagram (SLD) / schematic	
	layout for the proposal indicating the ratings and	
2	quantity of major components viz. SPV Modules,	
	nos. of arrays,AC & DC distributions, PCUs etc.	
	Enclose the proposed layout of the SPV module,	
3	array showing the spacing between arrays, walk	
	way width etc.	
	Confirm the minimum guaranteed annualized	
4	energy (KWH/year) that will be generated from	
-	solar energy source and available for internal use	
	for 25years.	
	Confirm the area required by the bidder for	
5	installationof SPV panels along with its structure,	
	maintenance, walk ways to provide a generating	
	capacity of 45 KWp as required in the tender.	
	Enclose drawing showing typical arrangement for	
6	mounting of SPV modules along with	
	dimensionand nature of foundation.	
7	Confirm the total quantum of AC power to	
	beavailable from the installed SPV Modules	
8	Confirm the location of meters to be provided for	
	continuous measurement of AC power generated.	
	Please confirm the acceptance test procedures	
9	tobe adopted during FAT for the SPV Modules.	
	Alsoindicate the standard to be followed.	
	Please confirm the acceptance test procedure to be adopted on completion of the work for the	
10	major components and the complete system at	
	site.	
	Test certificate for SPV submitted as per clause	
11	7.3 indicating the requirement indicated in clause	
' '	7.10.1.	
	RFID facility available as per tender clause 7.5 of	
12	tender	
13	Type Test certificate submitted as per clause 7.8	
	Inverter/PCBs/MPPT Metering Requirements	
14	indicated in clause 7.10.6	

Annexure 'N' Schedule of Technical details to be furshihed by the bidder

Α	SPV MODULE	20 kWp Solar PV System	5 kWp Solar PV System
i.	Manufacture's Name & Address		
ii.	Type of Modules with cat. Reference		
	Design of module at standard test condition		
	a) Peak power watt		
iii.	b) Peak power voltage		
	c) Peak power current		
	d) Open circuit voltage		
	No. of SPV Modules		
iv.	proposed		
٧.	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 520Wp)		
:::	Photo electrical		
viii.	conversion efficiency of		
ix.	Fill factor of the SPV module (>0.70)		
Х	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)		
В	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		
С	MODULE MOUNTING STRUCTURE		
i)	Type of structure and its materials used in frame and accessories		
ii)	Type of mounting structures		
iii)	Overall dimensions		

iv)	Surface azimuth angle of PV Modules		
v)	Tilt angle (Slope) of PV module		
vi)	Confirm structure & module frame shall be designed at windspeed 180 km/hr.		
D	POWER CONDITIONING UNITS (PCUs)		
i.	Manufacturer's name & address		
ii.	Type of PCU (string type)		
iii.	Number of units proposed		
iv.	Rated capacity of each PCU		
V.	Input DC Voltage range		
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		
xvi.	Type of Protection provided		
xvii	Over Load Condition	Yes / No	Yes / No
xviii	Short Circuit Protection	Yes / No	Yes / No
xix.	Low / High Voltage Protection	Yes / No	Yes / No
XX	Power Electronic Component Protection	Yes / No	Yes / No
E.	METERING		
	Nos. of meters proposed to be provided		
ii.	Location of meters		
	Manufacturer's name & address		
iv	Confirm compliance with laid down specification		

Signature	&	Seal	of	the	firm

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Annexure 'O'

Guaranteed Energy generation for 25 years

Name of the work: Design, supply, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar, Chennai

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

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			

Signature & Seal of the firm Date:

Annexure 'P'

Format for undertaking for product and Maintenance Support

(To be submitted by the tenderer)

NAME OF WORK: Design, supply, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar, Chennai

Pursuant to a contract awarded by Reserve Bank of India for the full scope of work as contained under the 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

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,
For

Authorised signatory

Annexure 'Q'

Format for undertaking by Original Equipment Manufacturer

(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 (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar, Chennai

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 therepsective manufacturer.

Annexure 'R'

Declaration of Country of Origin

(To be furnished by the tenderer)

NAME OF WORK: Design, supply, installation, testing and commissioning (DSITC) of 45 kWp (2 X 20 kWp & 1 x 5kWp) Grid Interactive Solar power plant at Bank's Staff Quarters, Besant Nagar, Chennai

This is to certify that

a)										
b) before	The SPV Modules will be manufactured, assembled and offered for inspection dispatch at the works/factory of (address)									
There	efore,	the	country	of or	igin of	SPV	modules	s will	be	
c) offere (addr	ed for in		onditioning on before di	•	•					
There	efore,	the	country	of	origin	of	PCU	shall	be	
Date: Seal)				(Name	and addres	ss of the	company v	with Com	pany	

Note: There could be different country of origin for SPV Modules & PCUs. Specific address shall be provided for carrying out pre-delivery inspection at the works of the manufacturer.

Annexure 'S'

Factory Acceptance Test

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

- b. **Physical Inspection:** The PV modules shall be inspected for its physical parameters such as dimensions, material and workmanship etc.
- c. **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:
- Open Circuit Voltage (Voc)
- Short Circuit Current (Isc)
- Max. Power (Pmax.)
- Voltage at Max. Power (Vmax.)
- Current at Max. Power (Imax.)
- Fill Factor
- Module efficiency

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

Signature & Seal of the firm Date: