# **TENDER BID DOCUMENT**

# **TENDER for**

- Design, Supply, Installation and Commissioning of 100 KWp Solar Photo Voltaic Roof Top System
  - Five (5) years Comprehensive Maintenance and Performance Warranty Contract (MPWC)

at

The South India Textile Research Association (SITRA), Coimbatore, Tamilnadu

13/37, Avinashi Road, Coimbatore – 641014, Tamilnadu Phone: (0422) 4215333, 2574367-8-9 Fax: (0422) 4215300 E-mail: purchase@sitra.org.in Website: www.sitra.org.in

[(This tender document has 40 pages including this page(excluding Appendices)]

Cost of bid document: Rs.2360/- (inclusive of 18% GST)

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### **Chapter 1 - Notice Inviting Bid**

### The South India Textile Research Association (SITRA)

13/37, Avinashi Road, Civil Aerodrome Post, Coimbatore – 641014, Tamilnadu Phone: (0422) 4215333, 2574367-8-9 Fax: (0422) 4215300, E-mail: purchase@sitra.org.in Website: www.sitra.org.in

Tender No.: SITRA/ENGG/SOLAR POWER/001/2019

Date: 29/05/2019

**Sub:** (i) Design, Supply, Installation and Commissioning of 100 KWp Solar Photo Voltaic Roof Top System

(ii) Five (5) years Comprehensive Maintenance and Performance Warranty Contract (MPWC) of 100 KWp Solar Photo Voltaic Roof Top System at The South India Textile Research Association (SITRA), Coimbatore, Tamilnadu

Dear Sir/Madam,

The South India Textile Research Association (SITRA), Coimbatore has the pleasure in inviting offers from eligible Indian manufacturers for the above work with your best binding price offer as per the specifications and terms & conditions mentioned in the bid document. Salient features of the bid document are given below:

Tenders are invited from the reputed manufacturers of MNRE approved channel partners as per the details give below:

Item	Tender No.	Total Capacity	Cost of Tender Document	EMD
<ul> <li>Design, Supply, Installation and Commissioning of 100 KWp Solar Photo Voltaic Roof Top System</li> <li>Five (5) years Comprehensive Maintenance and Performance Warranty Contract (MPWC) at The South India Textile Research Association (SITRA), Coimbatore, Tamilnadu</li> </ul>	SITRA/ENGG/ SOLAR POWER/001/ 2019	100 KW	Rs.2360/-	3 %

Tender Document can be downloaded from SITRA website: <a href="www.sitra.org.in">www.sitra.org.in</a> for which the cost of Tender Document amounting Rs.2360/- (inclusive of GST 18%) is to be enclosed as demand draft, in favour of "The South India Textile Research Association (SITRA)" payable at Coimbatore during submission of hard copy of tender, failing which, tender shall not be considered. Hard copies of the tenders with all necessary enclosures should be addressed to: The Director, The South India Textile

Research Association (SITRA), 13/37, Avinashi Road, Civil Aerodrome Post, Coimbatore – 641014, Tamilnadu.

A <u>Pre-Bid Meeting</u> of the Prospective Bidders will be held at <u>11.00 a.m. on 15/06/2019</u> at The South India Textile Research Association (SITRA), 13/37, Avinashi Road, Civil Aerodrome Post, Coimbatore – 641014, Tamilnadu.

Non-attendance of pre-bid meeting will not be a cause for disqualification of Bidder.

Tender documents can be downloaded from SITRA website: www.sitra.org.in from  $\underline{29/05/2019}$  till  $\underline{04/07/2019}$  upto  $\underline{12.00}$  noon. Last date for submission of duly filled up sealed tender shall be upto  $\underline{04.00}$  p.m. on  $\underline{04/07/2019}$ . Only eligible bidders satisfying the techno-commercial bids will be called for the Financial bids opening which will be held on  $\underline{12^{th}}$  July 2019 at  $\underline{10.30}$  a.m. at SITRA.

Prospective bidders are requested to remain updated for any amendments/modification/cancellation, etc. in the bid document conditions/terms, in the above mentioned website. No separate notifications will be given for such amendments/modifications in the print media (press) or intimated to the bidders separately.

Director, SITRA reserves the right to reject any or all tenders without assigning any reasons thereof.

Sd/-Director, SITRA

## **Chapter 2 - Bid Details**

S.	Description	Details
No.		
1	Tender No. & Date	SITRA/ENGG/SOLAR POWER/001/2019 dated 29/05/2019
2	Scope of work	(i)Design, Supply, Installation and Commissioning of 100 KWp Solar Photo Voltaic Roof Top System at SITRA, Coimbatore. (ii) Five (5) years Comprehensive Maintenance and Performance Warranty Contract (MPWC) of 100 KWp Solar Photo Voltaic Roof Top System at SITRA, Coimbatore.
3	Place and submission of bid documents and address for communication	The South India Textile Research Association (SITRA), 13/37, Avinashi Road, Civil Aerodrome Post, Coimbatore – 641014. Phone: (0422) 4215308, 4215333, 2574367-8-9, Fax: (0422) 4215300. E-mail: purchase@sitra.org.in, Website: www.sitra.org.in
4	Date and time of Pre-Bid Meeting	Date: 15/06/2019 Time: at 11.00 A.M. Venue: SITRA, Coimbatore
5	Last date and time of submission of bids (only Hard copies)	Date: 04/07/2019 Time: Upto 04.00 P.M. (submission of documents after 04.00 P.M. will not be accepted at any circumstances).
6	Date and time of opening of Financial Bid	Date: 12/07/2019 Time: at 10.30 A.M. Venue: SITRA, Coimbatore
7	Cost of bid document	Rs.2360/- in the form of demand draft favouring "SITRA" payable at Coimbatore (to be enclosed along with bid documents)
8	Earnest Money Deposit (Refundable)	Applicable: 3% of Tender Value in the form of D.D. favouring SITRA, Coimbatore (to be enclosed along with bid documents)
9	Multiple bidding system	Not allowed.
10	Type of tender	Manual two (2) envelope bidding.
11	Time of completion	08 weeks from the date of issuance of award.
12	Validity of offer	The offer shall remain valid up to 365 days from the due date of submission of offer.
13	Validity of earnest money Deposit	The earnest money shall be submitted by the bidder in the form of demand draft from any Nationalized/Scheduled/Private bank. This demand draft shall have validity for at least 3 months.
14	Tender processing fee	Nil
15	Contract performance security	Applicable: 5% of the contract price (excluding MPWC)
16	Contact details for technical queries	Mr. M. Muthukumaran Phone: (0422) 4215316, 4215333, Fax: (0422) 4215300 E-mail: mmk@sitra.org.in; purchase@sitra.org.in Deadline: 14/06/2019 upto 12.00 noon through E-mail
17	Site visit	Only on 14.06.2019 (with prior intimation)
	1	1

### <u>Chapter 3 - General Terms and Conditions of Tender Document</u>

### 1. Bid Document

**1.1** This Bid Document comprises of total SIX (6) chapters apart from Appendices. In addition, any other documents/instruction/amendments/revisions issued by SITRA to the bidder till the due date of opening of the bids shall also be deemed to be integral part of the bid document. Failure to furnish all the information as per the bid document in every respect will be at the bidder's risk.

### 2. Cost of Bid Document

- **2.1** Bidders can download the Bid Document from SITRA website: www.sitra.org.in and submit the cost of the bid document amounting Rs.2360/- (inclusive of 18% GST), as applicable along with Bid documents.
- **2.2** Bid applications without the cost of bid document will be rejected.

### 3. Scope of Work

- **3.1** The Scope of work for 100 KWp SPV Roof Top System includes (i) Design, manufacturing, shop testing, packing & forwarding, transportation, transit insurance, supply of 100 KWp SPV Roof Top System at identified sites via transit godown of The South India Textile Research Association (SITRA) for checking/store entry, installation, testing & commissioning of 100 KWp SPV System at SITRA's premises at Coimbatore, Tamilnadu & (ii) five (5) years Comprehensive Maintenance & performance Warranty Contract (MPWC) of SPV System complete in all respects along with one set of operational instruction cum maintenance manual (in English) as per the directions of SITRA.
- **3.2** SITRA reserves the right to amend the scope of work, accept or reject any or all the offers/bids, in part or in full or cancel/withdraw the invitation for bids without assigning any reasons whatsoever and in such a case, the bidder/intending bidder shall have no claim arising out of such action.
- **3.3** The Bidder shall carefully check the specification and shall satisfy himself regarding the technical requirement and completeness of the equipment/system.
- **3.4** Bidder should be capable and agree to install the 100 KWp SPV Roof Top System at The South India Textile Research Association (SITRA), Coimbatore. SITRA reserves the right to award work to any bidders at its discretion.
- **3.5** The bidders should beforehand get thoroughly familiarized with the incidental expenditures/charges on transportation, installation and maintenance expenses, etc. They should also assess the local conditions including prevailing law and order problems before submitting their offer. Any claim on change/increase in the rate/price/cost of the work due to any reason will not be entertained at any circumstances.
- **3.6** It is not necessary to select the lowest quoted rate. SITRA reserves the right to decide the reasonable price/rate for successful implementation of the project.

### 4. Earnest Money Deposit

- **4.1** The bidder should submit the earnest money in the form of Demand Draft from a Nationalized Bank/Scheduled Bank of requisite value with validty of 3 months, as mentioned in Chapter 2 (Bid Details).
- **4.2** SITRA shall not be liable to pay any Bank charges, commission or interest etc. on the amount of 'EMD'. In case 'EMD' is in the form of a 'Bank Guarantee', the same shall be from any Nationalized/Scheduled Bank as specified in the List of Banks enclosed at **Appendix-15** of Tender documents or a branch of an International Bank situated in India and registered with 'Reserve Bank of India' as Scheduled Foreign Bank. However, in the case of 'Bank Guarantee' from Banks other than the Nationalized/Scheduled Indian Banks, the Bank must be commercial bank having net worth in excess of INR 500 Crores (Indian Rupees Five Hundred Crores only).
- **4.3** Bidders failing to submit earnest money will be rejected.
- **4.4** The request for adjustment of earlier dues in place of earnest money will not be entertained.
- **4.5** The earnest money shall be returned to all unsuccessful bidders in technical evaluation, not later than 30 (thirty) days after signing of the Contract Agreement with successful bidder.
- **4.6** The earnest money shall be forfeited if
  - a. Any bidder withdraws his bid or varies his offer during the bid validity period.
  - b. Any bidder has indulged in corrupt/fraudulent/collusive/coercive practice.
  - Any bidder modifies bids during the period of bid validity (after last date of submission).
  - d. Any bidder violates any other condition, mentioned elsewhere in the tender document.
  - e. Any bidder fails to accept 'arithmetical corrections' in his bid.
  - f. The successful bidder fails to furnish his acceptance of the Order within fifteen days of placement of Work Order by SITRA.
  - g. The successful bidder fails to furnish Contract Performance Security
  - h. The successful bidder fails to successfully complete the work within the stipulated time frame.
- **4.7** Delay in completion due to extreme and unavoidable situations will have to get approved by The Director, SITRA. This approval will also have a cut-off date by which the entire work will have to be completed. If not, the bidder stands to loose his EMD.
- **4.8** The earnest money of the successful bidder can be either adjusted towards Performance Contract Security or refunded after completion of the project in all respects.
- **4.9** MSMEs (Micro, Small and Medium Enterprises) registered under NSIC/Udyog Aadhar/DIC only are exempted from submission of EMD. In order to avail the exemption in EMD in case of Joint Venture, all the members of the JV should be registered as MSME Vendors under NSIC/Udyog Aadhaar Category/DIC.

**Note**: In case of extension(s) of last due date of the Tender submission, the latest extension issued shall be considered as the final due date of Tender submission and accordingly the Earnest Money Deposit validity and Bid validity should be calculated and sufficed. The validity of the submitted EMD and bid validity need to

be revised by respective bidders, in case the bids are already submitted prior to the last due date of the initial Tender submission deadline.

### 5 Performance Guarantee

- **5.1** Performance Warranty Bond shall be deposited by the supplier @ 5% of the Contract Price (excluding Comprehensive Maintenance and Performance Warranty Contract (MPWC)) in the form of Bank Guarantee for 5 (five) years period from the date of completion & commissioning of the project.
- **5.2** Towards Comprehensive Maintenance and Performance Warranty Contract (MPWC) of the project, within 15 (fifteen) days from the issuance of the Notification of Award/ Letter of Intent/ Letter of Allocation from SITRA, the successful bidder shall furnish an unconditional and irrevocable Contract Performance Security in accordance with conditions of the Contract. The Contract Performance Security shall be in the form of either Banker's Cheque or Demand Draft or Bank Guarantee and shall be in the currency of the Contract and will be issued in the name of "The South India Textile Research Association". The Contract Performance Security shall be for an amount equal to that specified in the conditions of Contract towards faithful performance of the contractual obligations, performance of equipment and shall cover the entire Contract. The validity of Contract Performance Security shall be in conjunction with the provisions mentioned in the Tender document.
- **5.3** Bank Guarantee towards Contract Performance Security shall be from any bank as specified in the List of Banks (**Appendix-15**) or a branch of an International Bank situated in India and registered with Reserve Bank of India as scheduled foreign bank. However, in case of Bank Guarantees from Banks other than the Nationalized Indian banks, the Bank must be a commercial Bank having net worth in excess of INR 500 Crores and a declaration to this effect should be made by such commercial bank either in the Bank Guarantee itself or separately on its letterhead. This Bank Guarantee shall be valid for a period in conjunction with the provisions mentioned in the Tender document. The Contract Performance Security may also be submitted in the form of 'crossed payee accounts only' Demand Draft/ Banker's Cheque in favour of "The South India Textile Research Association".
- **5.4** Any default or failure of the successful bidder to comply with the requirements of this article shall constitute sufficient grounds for the annulment of the award and forfeiture of the Contract Performance Security.
- **5.5** The Contract Performance Security has to cover the entire contract value including extra works / services also. As long as the Contract Performance Security submitted at the time of award takes care the extra works / services executed and total executed value are within the awarded contract price, there is no need for additional Contract Performance Security. As soon as the total executed value is likely to burst the ceiling of awarded contract price, the vendor should furnish additional Contract Performance Security on proportionate basis for the additional amount in excess to the original contract value.
- **5.6** Further, any delay beyond 15 (Fifteen) days shall attract an interest @ 1.25% per month on the total Contract Performance Security amount, calculated on pro-rata basis accordingly. SITRA at its sole discretion may cancel the Contract Agreement & forfeit 100% of EMD, in case Contract Performance Security is not submitted within 15 days from issuance of Order.

However, the total project completion period shall remain the same. Part Security shall not be accepted.

- **5.7** If the Vendor/Sub-Vendor or their employees or the Vendor's agents and representatives shall damage, break, deface or destroy any property belonging to SITRA or others during the execution of the Contract, the same shall be made good by the Vendor at his own expenses and in default thereof, the Engineer-in-Charge may cause the same to be made good by other agencies and recover expenses from the Vendor (for which the certificate of the Engineer-in-Charge shall be final).
- **5.8** All compensation or other sums of money payable by the Vendor to SITRA under terms of this Contract may be deducted from or paid by the encashment or sale of a sufficient part of his Contract Performance Security or from any sums which may be due or may become due to the Vendor by SITRA of any account whatsoever and in the event of his Contract Performance Security being reduced by reasons of any such deductions or sale of aforesaid, the Vendor shall within 10 (Ten) days thereafter make good in cash, bank drafts as aforesaid any sum or sums which may have been deducted from or realized by sale of his Contract Performance Security, or any part thereof. No interest shall be payable by SITRA for sum deposited as Contract Performance Security.
- **5.9** In case of default or failure of the Vendor to comply with the requirements of any of the Obligations covered under this Tender Document and/ or Contract Agreement shall constitute sufficient grounds for forfeiture of the Contract Performance Security.

### 6 Procedure for action in case of Corrupt/Fraudulent/Collusive/Coercive Practices

**6.1**Procedure for action against bidders in case of Corrupt/Fraudulent/Collusive/Coercive Practices is enclosed as **Annexure – A** along with this document

### 7 Public procurement policy for Micro and Small Enterprises (MSEs)

- **7.1** As per the Public Procurement Policy for Micro and Small Enterprise (MSEs) order 2012, issued vide Gazette Notification number 503, dated 23.03.2012 by Ministry of Micro, Small and Medium Enterprise of Govt. of India, and specific to this tender, MSEs must be registered with any of the following agencies/ bodies shall be exempted from EMD submission upon production of valid registration certificate.
  - (i) District Industries Centre (DIC)
  - (ii) National Small Industries Corporation (NSIC)
  - (iii) Udyog Aadhaar Memorandum
- **7.2** MSEs participating in the tender must submit the certificate of registration with any one of the above agencies. The registration certificate issued from any of the above agencies must be valid as on close date of the tender.
- **7.3** The MSEs, who have applied for registration or renewal of registration with any of the above agencies/ bodies, but have not obtained the valid certificate as on close date of the tender, are not eligible for exemption/ preference.

**7.4** In case of JV, in order to avail the exemption to Earnest Money Deposit (EMD), all the members of JV should be registered under any one of the Categories mentioned under clause 7.1 above. In such a case, the bidder shall submit the documentary evidence satisfying the same. If the bidder does not provide the above confirmation or appropriate document or any evidence, then it will be presumed that they do not qualify for any preference admissible in the tender.

### 8 Submission of Bids

- **8.1**Bidders are advised to submit their bids strictly based on the specifications, terms and conditions contained in the bid document and subsequent revisions/amendments, if any.
- **8.2**The bid shall be prepared and submitted by typing or printing in English with indelible black ink on white paper in consequently numbered pages duly signed by authorized signatory with company seal affixed <u>on each page</u>. Any part of the bid, which is not specifically signed by the authorized signatory and not affixed with company seal, shall not be considered for the purpose of evaluation.
- **8.3** Original copy of bid document, amendments/revisions to bid document, including minutes of meeting(s), issued by SITRA, if any, shall also be signed and submitted along with the bid.
- **8.4** All the Appendices must be on the bidder's official letterhead. Any change in wording of the sample forms will lead to rejection of the bid application.
- **8.5**The offer shall contain no erasures or overwriting except as necessary to correct errors made by bidder. Such corrections, if any, shall be initialed by the person signing the offer.
- 8.6 Hard copy of Bid Document should be submitted in Hard Bond or Spiral Binding.
- 8.7 The Bid Document should have proper paging and flagging of Annexure/details.
- **8.8** Any overwriting/illegible/erasing, etc. in the documents submitted by the firms shall not be accepted and will not be considered in the evaluation.
- **8.9** Language of Bid The bid prepared by the bidder and all correspondence/ drawings and documents relating to the bid exchanged by bidder and SITRA shall be written in English language alone.

### 9 Mode of submission of Bids

- **9.1**The bidder must submit hard copy of all necessary forms given in the Appendices as listed in the Check List with supporting documents.
- **9.2** The bid shall be submitted by the Bidder under "Two Envelope" procedure of bidding. Under this procedure, the bid submitted by the Bidder in two envelopes First Envelope (also referred to as Techno-Commercial Part) and Second Envelope (also referred to as Financial Part) shall comprise of the Hard copy of the bid with the following documents to be submitted in sealed envelope, as part of First Envelope. The envelope shall bear {the name of Tender, the Tender No. and the words 'DO NOT OPEN BEFORE' (due date & time)}.

- (a) Original Non-Refundable Cost of Tender Document
- (b) 'Covering Letter' on Bidder's 'Letterhead' (in Original) clearly specifying the enclosed contents, as per **Appendix-1**.
- (c) EMD in original as per Appendix-11 or as prescribed.
- (d) In case of Bid from Joint Venture, the Joint Venture Agreement (as per **Appendix-8**) and Power of Attorney for Joint Venture Agreement (as per **Appendix-9**) both in Original.
- **9.3** The hard copy of the Bid Documents should be submitted in a Sealed Covering Envelope and addressed to SITRA at address specified in the Bid Details. The Covering Envelope shall have the following Sticker:

Tender Document for "Design, Supply, Installation & Commissioning of 100 KWp Solar Photo Voltaic Roof Top System" at SITRA, Coimbatore, Tamilnadu			
Tender Document No.	SITRA/ENGG/SOLAR POWER/001/2019		
Last date of submission	04 JULY 2019		
Bids submitted by	(Enter full name and address of the Bidder)		
Authorized Signatory	(Signature of the Authorized Signatory) (Stamp of the Bidder)		
Bid submitted to	The Director The South India Textile Research Association (SITRA) 13/37, Avinashi Road, Civil Aerodrome Post Coimbatore – 641014, Tamilnadu		

- **9.4** The Techno-Commercial Bid should not contain price of any item. Such cases, even if found anywhere, shall not be given any cognizance.
- 9.5 Only one copy of Techno-Commercial Bid should be submitted.

### 10 Price

- 10.1 Bidders must bid in Indian Rupees (INR) only.
- **10.2** The Bidder shall quote price as per **Appendix-20**. Price quoted shall be firm & binding and shall not be subject to any variation whatsoever, on any account except for statutory variation on taxes & duties during contractual completion period. The price should be inclusive of all taxes, duties, levies, etc. as on date of submission of bid. Bidder need to submit detailed break-up of Goods & Service Tax (GST) (applicable for both Central and State). This data is required to ascertain the
  - a) Computation of taxes assumed at the time of bidding.
  - b) The total impact due to revision in applicable tax rate or introduction of new tax, if any.

Bidders are required to ascertain the correctness of amount related to Goods & Service Tax (GST) as it will impact the Price assessment part at the time of evaluation of price bid.

**10.3** The Bidder shall quote the prices in 'figures' & words. There should not be any discrepancy between the prices indicated in figures and the price indicated in words.

- **10.4** If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity specified by SITRA, or between subtotals and the total price, the unit or subtotal price shall prevail, and the quantity and the total price shall be corrected. However, in case of items quoted without indicating any quantity or the items for which the quantities are to be estimated by the Bidder, the total price quoted against such items shall prevail. If there is a discrepancy between words and figures, the amount in words will prevail.
- **10.5** The Bidder should ensure that the prices furnished in various price schedules are consistent with each other. In case of any inconsistency in the prices furnished in the specified price schedules to be identified in Bid Form for this purpose, SITRA shall be entitled to consider the highest price for the purpose of evaluation and for the purpose of award of the Contract use the lowest of the prices in these schedules.
- **10.6** Bidders are required to submit a copy of the GST Registration Certificate while submitting the bids.

### 11. Pre-Bid Meeting and Authority of Person Signing the Documents

- **11.1** A Pre-Bid Meeting will be held at The South India Textile Research Association (SITRA), Coimbatore on the designated Date and Time mentioned in Bid Details on Page No.3 of this Bid Document. All the prospective Bidders are advised to attend this Pre-Bid Meeting. Bidders are advised to quote their price only after seeing the Work site. The details of the Work will be discussed in this Pre-Bid Meeting, including work site aspects. The Bidders should furnish the Authorization letter as per **Appendix-3** with the seal of the company for the person attending the Pre-Bid Meeting as well as Bid Opening meeting & signing the bid document.
- **11.2** A person signing the bid-document or any document forming part of the bid document shall be deemed to warrant that he has authority to bind such offer/document and if on enquiry it appears that the person signing has no authority to do so, SITRA may, without prejudice to other civil and criminal remedies, cancel the bid/contract and hold the signatory liable for all costs and damages.
- **11.3** Text of the questions raised and the responses given, together with any responses prepared after the meeting, will be uploaded on SITRA website against the Tender.
- **11.4** Any modification of the Contents of Tender Documents listed, that may become necessary as a result of the Pre-Bid Meeting shall be made by SITRA exclusively through the issue of an Addendum/ Corrigendum.

### 12 No Claim or Compensation for Submission of Tender

The bidder whose bid is not accepted shall not be entitled to claim any costs, charges, expenses and incidental incurred by him through or in connection with his submission of bid, even though SITRA may decide to withdraw the notice inviting bid.

### 13 Eligibility and Qualification Criteria

### 13.1 Technical Eligibility Conditions:

The bidder should be a Registered Manufacturing Company/Firm/Corporation in India of SPV Cells/Modules or Solar Inverters/PCU (Conforming to relevant National/International Standards). Cumulative Experience of the Bidders should be of executing contracts of On-Grid Solar Photo Voltaic Roof Top Systems (installed & commissioned). It is preferable that Bidders should have designed, manufactured, supplied, installed & commissioned at least 1 (one) 100 KWp On-Grid Solar Photo Voltaic Roof Top System in Govt. aided/Govt. Institution with Work Order awarded in Bidder's Name/Firm (Copies of work orders must be enclosed to support the cumulative experience). Experience should be of Design, Manufacture, Supply and Installation & Commissioning On-Grid SPV Systems only. Experience of Off-Grid Solar Systems should be indicated separately.

- **13.2** It is preferable that the Bidder has credit rating as a MNRE accredited On-Grid Channel Partner (from MNRE Accredited Rating Agency).
- **13.3** Bidder should have Test Certificate for the components of tendered 100 KWp SPV Systems like PCU/inverter, PV module, etc from an approved/competent testing centre as per our technical specifications.
- **13.4** The Bidder should preferably have a registered office/authorized dealer/service network in Coimbatore for smooth execution of MPWC, in place before award of contract.

### 14 Financial Eligibility Conditions

- 14.1 The Minimum Average Annual Turnover of the Company/Firm/Corporation in the last three financial years (i.e. FY 2015-16, 2016-17 & 2017-18) should be at least INR 10.00 Crores. MAAT shall mean Revenue from Operations as incorporated in the profit & loss account excluding other income, e.g. sales of fixed assets. This must be the individual Company's turnover and not that of any group of Companies. A summarized sheet of turnover certified by registered CA/Statutory Auditor should be compulsorily enclosed along with corresponding annual accounts.
- **14.2** "Net Worth" of the Bidder shall be calculated as per Company Act 2013. The net worth for the last three financial years should be positive.
- **14.3** The bidder should have a minimum Working Capital of INR 2.0 Crores as per the last audited financial statement. If the bidder's working capital is inadequate, the bidder should supplement this with a letter from the bidder's bank, having net worth not less than INR 500 Crores, confirming the availability of the line of credit for equal to or more than INR 2.0 Crores to meet the Working Capital requirements.
- **14.4** In case the bidder is a holding company, the financial position criteria for a holding company only (i.e. excluding its subsidiary/ group companies) shall apply. In case bidder is a subsidiary of a holding company, financial position criteria shall be of that subsidiary company only (i.e. excluding its holding company).
- **14.5** The Bidder will provide a copy each of audited annual report of previous three financial years for ascertaining their turnover and Net Worth for the purpose of verification.

- **14.6** The Net Worth of the Bidder as on the last day of the preceding financial year shall not be less than total paid-up share capital.
- **14.7** The derivation of "Net Worth" of the Bidder shall be done as per Company Act 2013.
- **14.8** Other income shall not be considered for arriving at annual turnover.
- **14.9** A scanned copy of certificate of incorporation shall be furnished in the bid.
- **14.10** Bidders shall furnish documentary evidence as per the prescribed format (**Appendix-7**), duly certified by Authorized Signatory and the Statutory Auditor / Practicing Chattered Accountant of the Bidding Company in support of their financial capability.
- **14.11** The Bidder shall furnish the following documentary evidences along with the Bid in support of meeting of above mentioned Financial Eligibility Criteria:
  - (i) "Details of Financial capability of Bidder" as per **Appendix-7** duly signed and stamped by a Chartered Accountant.
  - (ii) Audited financial results i.e. Annual Report including Audited Balance Sheet and Profit & Loss Account Statement for immediate three preceding financial years to meet the above Financial Criteria.

### 15 Joint Venture Conditions

- **15.1** In case the bid is submitted by a Joint venture (JV) of two or more firms as partners, they must meet the following requirements: -
  - The Lead partner of the JV shall meet individually not less than 50% of minimum Financial Eligibility Conditions given at clause 14 above. However, all the JV partners must meet collectively 100% Financial Eligibility Conditions mentioned at Clause 14.
  - All the partners of the JV must meet collectively 100% of Technical Eligibility Conditions given at Clause 14 above.
  - The Joint Venture must satisfy collectively the Criterion of Clauses 14 & 15 for which purpose the relevant figure of average annual turnover and liquid assets/ credit facilities for each of the partners of the JV shall be added together to arrive at Joint Venture total capacity. The net worth of each Partner of JV should be positive.
  - A Joint Venture (JV), may or may not be incorporated as a Registered Company.
  - A Joint Venture (JV), if incorporated as a Registered Company, is required to submit EMD and Performance Security in the name of Joint Venture only. In case the JV has not been formed as a Registered Company, the EMD and Performance Security shall be submitted in the name of Lead Partner only.
  - o JV is required to submit Form of Undertaking by the JV Partners (**Appendix-8**) and Form of Power of Attorney (**Appendix-9**).
  - JV is also required to declare detailed scope of work to be executed by each partner of JV.
- **15.2** SITRA may assess the capacity and capability of the bidder, to ascertain that they can successfully execute the scope of work covered under the package within stipulated completion period. This assessment shall inter-alia include (i) document verification, (ii) bidder's work/manufacturing facilities visit, (iii) manufacturing capacity, details of works executed, works in hand, anticipated in future & the balance capacity available for the present scope of work, (iv) details of plant and machinery, manufacturing and testing facilities, manpower and

financial resources, (v) details of quality systems in place, (vi) past experience and performance, (vii) customer feedback, (viii) banker's feedback etc.

**15.3** In order to avail the benefits of exemptions in JV, all the partners of JV must be MSME Vendors/ Developers registered under NSIC/ Udyog Aadhaar Category only. SITRA reserves the right to waive minor deviations if they do not materially affect the capability of the Bidder to perform the contract.

### 16 Validity of Offer

Unless otherwise specified, the bidder shall keep his tender valid initially for a period of **365** days from the due date of submission of the offer.

### 17 Clarification of tender documents

- **17.1** A prospective Bidder requiring any clarification(s) of the Tender Documents may notify SITRA in writing by E-mail or at SITRA's mailing address indicated in the Bid Information Sheet not later than **14.06.2019.** SITRA reserves the right to ignore the bidders' request for clarification if received beyond the aforesaid period. All queries received up to the date prescribed above shall be consolidated along with the discussions during the pre-bid meeting, all of which shall be consolidated and uploaded on SITRA's website www.sitra.org.in.
- **17.2** Any clarification or information required by the Bidder but same not received by SITRA is liable to be considered as "no clarification/ information required".
- **17.3** No clarifications shall be provided to queries from bidders beyond 14.06.2019.

### 18 Other Terms & Conditions

- **18.1** Bidders shall submit their offer strictly as per terms and conditions of the tender document without any deviation.
- **18.2** Incomplete tender of tenders not submitted as per requirement as indicated in the tender document are likely to be rejected.
- **18.3** Insertion, post-script, addition and alteration in Hard Copy shall not be recognized unless confirmed by bidder's signature and stamp.
- **18.4** If at any time any of the documents/information submitted by the bidder is found to be incorrect, false or untruthful, the resultant order may be summarily rejected / cancelled at the risk of the bidder.
- **18.5** Failure to furnish all information and documentary evidence as stipulated in the bid document or submission of an offer that is not substantially responsive to the bid document in all respects shall be summarily rejected.
- **18.6** All bids (hard copy) will be received in duly sealed cover within the due date and time. Bids received after the due date and time is liable for outright rejection.

**18.7** SITRA reserves the right to reject part or whole of the bid/order without assigning any reason thereof, postpone the date of receipt and opening of the bids or cancel the bid without bearing any liability, whatsoever, consequent upon such decision.

### 19 Interpretations

- **19.1** Words comprising the singular shall include the plural & vice versa.
- **19.2** An applicable law shall be construed as reference to such applicable law including its amendments or re-enactments from time to time.
- **19.3** A time of day shall have as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.
- **19.4** Different parts of this contract are to be taken as mutually explanatory and supplementary to each other and if there is any differentiation between or among the parts of this contract, they shall be interpreted in harmonious manner so as to give effect to each part.
- **19.5** The table of contents any headings or sub-headings in the contract has been inserted for case of reference only & shall not affect the interpretation of this agreement.

# Annexure-A (Refer Clause 6)

### PROCEDURE FOR ACTION IN CASE CORRUPT/FRAUDULENT/COLLUSIVE/COERCIVE PRACTICES

### A Definitions:

- A.1 "Corrupt Practice" means the offering, giving, receiving or soliciting, directly or indirectly, anything of value to improperly influence the actions in selection process or in contract execution.
  - "Corrupt Practice" also includes any omission for misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.
- A.2 "Fraudulent Practice" means and include any act or omission committed by an agency or with his connivance or by his agent by misrepresenting/submitting false documents and/ or false information or concealment of facts or to deceive in order to influence a selection process or during execution of contract/ order.
- A.3 "Collusive Practice amongst bidders (prior to or after bid submission)" means a scheme or arrangement designed to establish bid prices at artificial non-competitive levels and to deprive SITRA of the benefits of free and open competition.
- A.4 "Coercive practice" means impairing or harming or threatening to impair or harm directly or indirectly, any agency or its property to influence the improperly actions of an agency, obstruction of any investigation or auditing of a procurement process.
- A.5 "Vendor/Supplier/Consultant/Bidder" is herein after referred as "Agency"
- A.6 "Appellate Authority" shall mean Committee consisting of Authorized Representatives of SITRA.
- A.7 "Competent Authority" shall mean the authority, who is competent to take final decision for Suspension of business dealing with an Agency (ies) and Banning of business dealings with Agency (ies) and shall be the "Committee" concerned.
- A.8 "Allied Agency" shall mean all the concerns within the sphere of effective influence of banned/suspended agencies. In determining this, the following factors may be taken into consideration:
  - (a) Whether the management is common;
  - (b) Majority interest in the management is held by the partners or directors of banned/Suspended firm.
  - (c) Substantial or majority shares are owned by banned/suspended agency and by virtue of this it has a controlling voice.
- A.9 "Investigating Agency" shall mean any department or unit of SITRA investigating into the conduct of Agency/ party and shall include the Vigilance Department of SITRA, Central Bureau of Investigation, State Police or any other agency set up by the Central or state government having power to investigate.

### B Actions against bidder(s) indulging in corrupt/fraudulent/collusive/coercive practice

B.1 Irregularities noticed during the evaluation of the bids:

If it is observed during bidding process/bids evaluation stage that a bidder has indulged in corrupt/fraudulent/collusive/coercive practice, the bid of such Bidder (s) shall be rejected and its Earnest Money Deposit (EMD) shall be forfeited.

Further, such agency shall be banned for future business with SITRA for a period specified in para B 2.2 below from the date of issue of banning order.

- B.2 Irregularities noticed after award of contract
- (i) During execution of contract:

If an agency, is found to have indulged in corrupt/fraudulent/collusive/coercive practices, during execution of contract, the agency shall be banned for future business with SITRA for a period specified in para B 2.2 below from the date of issue of banning order.

The concerned order(s)/contract(s) where corrupt/fraudulent/collusive practices are observed, shall be suspended with immediate effect by Engineer-in-Charge (EIC)/SITRA whereby the supply/work/service and payment etc. will be suspended. The action shall be initiated for putting the agency on banning.

After conclusion of process, the order(s)/contract(s) where it is concluded that such irregularities have been committed shall be terminated and Contract Performance Security submitted by agency against such order(s)/contract(s) shall also be forfeited. The amount that may have become due to the vendor on account of work already executed by him shall be payable to the vendor and this amount shall be subject to adjustment against any amounts due from the vendor under the terms of the contract.

No risk and cost provision will be enforced in such cases.

(ii) After execution of contract and during Defect liability period (DLP)/Warranty/Guarantee Period:

If an agency is found to have indulged in corrupt/ fraudulent/ collusive/ coercive practices, after execution of contract and during DLP/Warranty/Guarantee Period, the agency shall be banned for future business with for a period specified in para B 2.2 below from the date of issue of banning order.

Further, the Contract Performance Security submitted by agency against such order(s)/contract(s) shall be forfeited.

(iii) After expiry of Defect liability period (DLP)/Warranty/Guarantee Period

If an agency is found to have indulged in corrupt/fraudulent/ collusive/coercive practices, after expiry of Defect liability period (DLP)/Warranty/Guarantee Period, the agency shall be banned for future business with SITRA for a period specified in para B 2.2 below from the date of issue of banning order.

### B.2.2 Period of Banning

Banning period shall be reckoned from the date of banning order and shall be for a period as may be decided by SITRA based on specific case basis. However, minimum banning shall be for 06 (Six) months from the date of banning order.

In exceptional cases where the act of vendor/vendor is a threat to the National Security, the banning shall be for indefinite period.

### C Effect of banning on other ongoing contracts/ tenders

- C.1 If an agency is put on Banning, such agency should not be considered in ongoing tenders/future tenders.
- C.2 However, if such an agency is already executing other order(s)/contract(s) where no corrupt/ fraudulent/collusive/coercive practice is found, the agency should be allowed to continue till its completion without any further increase in scope except those incidental to original scope mentioned in the contract.
- C.3 If an agency is put on the Banning List during tendering and no irregularity is found in the case under process:
- C.3.1 after issue of the enquiry/ bid/ tender but before opening of Technical bid, the bid submitted by the agency shall be ignored.
- C.3.2 after opening Technical bid but before opening the Price bid, the Price bid of the agency shall not be opened and EMD submitted by the agency shall be returned to the agency.
- C.3.3 after opening of price, EMD made by the agency shall be returned; the offer of the agency shall be ignored & will not be further evaluated. If the agency is put on banning list for fraud/ misappropriation of facts committed in the same tender/ other tender where errant agency emerges as the lowest (L1), then such tender shall also be cancelled and re-invited.

### D. Procedure for Suspension of Bidder

D.1 Initiation of Suspension

Action for suspension business dealing with any agency/(ies) shall be initiated by C & P Department when

- (i) Vigilance Department based on the fact of the case gathered during investigation by them recommend for specific immediate action against the agency.
- (ii) Vigilance Department based on the input from Investigating agency, forward for specific immediate action against the agency.
  - (ii) Nonperformance of Vendor/Supplier/Consultant leading to termination of Contract/ Order.
- D.2 Suspension Procedure:
- D.2.1 The order of suspension would operate initially for a period not more than six months and is to be communicated to the agency and also to Vigilance Department. Period of suspension can be extended with the approval of the Competent Authority by one month at a time with a ceiling of six months pending a conclusive decision to put the agency on banning list.
- D.2.2 During the period of suspension, no new business dealing may be held with the agency.
- D.2.3 Period of suspension shall be accounted for in the initial order passed for banning of business with the agency.

- D.2.4 The decision regarding suspension of business dealings should also be communicated to the agency.
- D.2.5 If a prima-facie, case is made out that the agency is guilty on the grounds which can result in banning of business dealings, proposal for issuance of suspension order and show cause notice shall be put up to the Competent Authority. The suspension order and show cause notice must include that (i) the agency is put on suspension list and (ii) why action should not be taken for banning the agency for future business from SITRA.

The competent authority to approve the suspension will be same as that for according approval for banning.

- D 3 Effect of Suspension of business:

  Effect of suspension on other on-going/future tenders will be as under:
- D.3.1 No enquiry/bid/tender shall be entertained from an agency as long as the name of agency appears in the Suspension List.
- D.3.2 If an agency is put on the Suspension List during tendering:
- D.3.2.1 after issue of the enquiry/bid/tender but before opening of Technical bid, the bid submitted by the agency shall be ignored.
- D.3.2.2 after opening Technical bid but before opening the Price bid, the Price bid of the agency shall not be opened and EMD submitted by the agency shall be returned to the agency.
- D.3.2.3 after opening of price, EMD made by the agency shall be returned; the offer of the agency shall be ignored & will not be further evaluated. If the agency is put on Suspension list for Fraud/mis-appropriation of facts conducted in the same tender/ other tender where errant agency emerges as the lowest (L1), then such tender shall also be cancelled and re- invited.
- D.3.3 The existing contract(s)/ order(s) under execution shall continue.
- D.3.4 Tenders invited for procurement of goods, works and services shall have provision that the bidder shall submit a undertaking to the effect that (i) neither the bidder themselves nor their allied agency/(ies) are on banning list of SITRA or the Ministry of New & Renewable Energy (ii) bidder is not banned by any Government Department/ Public Sector.

# <u>Chapter 4 - Rules and Regulations regarding Five (5) years</u> <u>Comprehensive Maintenance & Performance Warranty Contract</u> (MPWC)

- 1. The Maintenance and Performance Warranty Contract (MPWC)
  - 1.1 After the works are awarded to the successful Bidder, he enter into a Comprehensive Maintenance & Performance Warranty Contract (MPWC) with SITRA which includes the scope of operation and maintenance of Solar Photo Voltaic Roof Top System for a period of 5 (five) years. The date of MPWC period shall begin from the date of actual commissioning of the SPV system. The Maintenance & Performance Warranty Contract shall include servicing & replacement guarantee for parts and components (such as electronics, PCU/inverter, etc) of SPV System for 5 years from the date of installation. For PV modules, the replacement guarantee is for 25 years.
  - 1.2 The vendor should train 2 (two) staff of The South India Textile Research Association (SITRA), Coimbatore, Tamilnadu for day today operation, troubleshooting, maintenance, etc. in order to facilitate easy operation & maintenance after MPWC period.
  - 1.3 The vendor shall furnish an Indemnity Bond (Appendix-14) which is to be executed by him for the plant handed over by SITRA for performance of its MPWC (Entire SPV System).
  - 1.4 The maintenance service provided shall ensure proper functioning of the SPV System as a whole. All preventive/routine maintenance and breakdown/corrective maintenance required for ensuring maximum uptime shall have to be provided by the vendor. The vendor shall furnish a Performance Report, quarterly (every three months) to SITRA within 15<sup>th</sup> day of the following month. The Comprehensive Maintenance and Performance Warrantee Contract (MPWC) shall have two distinct components as described below:

### 2. Preventive/Routine Maintenance

2.1 This shall include activities such as, cleaning and checking the health of the SPV System, cleaning of module surface, tightening of all electrical connections, changing of tilt angle of module mounting structure, cleaning and any other activity that may be required for proper functioning of the SPV System as a whole.

- 3. Breakdown/Corrective Maintenance
  - 3.1 Whenever a complaint is lodged by the user, the bidder shall attend to the same within 24 hrs and in any case the breakdown shall be corrected within a period not exceeding 2 days from the date of complaint.
  - 3.2 The Supplier/Vendor shall maintain the following facilities at the local Service Centre for ensuring highest level of services to the end user:
    - 1. Adequately trained manpower, specifically trained by the supplier for carrying out the service activities.
    - 2. Adequate provisions for record keeping, which shall inter-alia, include the following:
      - (a) Details of system supplied within the command area of the service station including full name and address of end user, system and sub-system serial numbers and records of routine maintenance carried out (duly signed by the end user). These records shall include voltage, current, specific gravity, indicator charge, full glow, charge controller operation, electronics, etc.
      - (b) History record sheets of maintenance done.
    - 3. Adequate spares and manpower for ensuring lest down time of an individual system.
    - 4. The Service Centre shall send summary service reports to SITRA on half yearly basis. These reports shall include the following information:
      - (a) Number/Type of components of the SPV System covered by the Service Centre.
      - (b) Number/Type of components/systems working satisfactorily on the reporting date.
      - (c) Number of complaints received during the period of reporting.
      - (d) Number of complaints attended during the period of reporting.
      - (e) Major cause of failure, as observed.
      - (f) Major replacement made during the reporting period
  - 3.3 The date of Comprehensive Maintenance and Performance Warranty Contract period shall begin on the date of actual commissioning of the SPV systems.
  - 3.4 Any payment for release of MPWC charges will not be entertained or put up to Higher Authority of SITRA without the Performance Report duly attested by the authority of The South India Textile Research Association, Coimbatore, Tamilnadu.
  - 3.5 Bidder shall also furnish details of infrastructure that are presently available for establishing of Service Centers.

# CHAPTER 5 - TERMS & CONDITIONS REGARDING EVALUATION OF BIDS AND CONTRACTUAL OBLIGATIONS OF BIDDERS

### 1. Evaluation of Bids

- **1.1** Bid shall be evaluated as per evaluation criteria mentioned below on the total cost including GST. SITRA shall only use the criteria and methodology indicated in the tender documents.
- **1.2** If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity specified by SITRA, or between subtotals and the total price, the unit or subtotal price shall prevail, and the quantity and the total price shall be corrected. However, in case of items quoted without indicating any quantity or the items for which the quantities are to be estimated by the Bidder, the total price quoted against such items shall prevail. If there is a discrepancy between words and figures, the amount in words will prevail.
- **1.3** The prices of all such item(s) against which the Bidder has not quoted rates/ amount (viz., items left blank or against which '-'is indicated) in the Price Schedules will be deemed to have been included in other item(s).
- **1.4** The subtotal, total price or the total bid price to be identified in Bid Form for this purpose, irrespective of the discrepancy between the amounts for the same indicated in words or figures shall be rectified in line with the procedure explained above.
- **1.5** The amount stated in the bid will be adjusted by SITRA in accordance with the above procedure for the correction of errors. If the bidder does not accept the corrected amount of Bid, his bid will be rejected.
- **1.6** To ensure transparency, fairness in the bidding process and to further eliminate all arbitrariness in the procurement process, the evaluation of bids would be processed under the following two heads:
  - Techno-commercial aspects
  - Financial aspects
- **1.7** The bidder qualified appropriately under each of these sections and also cumulatively as enumerated above will be declared as the successful bidder.

### 2. Opening of Bids

**2.1** The Financial bid of only those bidders, whose Techno-commercial bids are found qualified after evaluation, will be opened and evaluated on 12<sup>th</sup> July 2019, at 10.30 a.m. at The South India Textile Research Association (SITRA), 13/37, Avinashi Road, Coimbatore – 641014 in presence of bidders or their authorized representatives who choose to attend the meeting. The representative should produce authorization letter to attend the bid opening meeting as mentioned in **Appendix-3**.

- **2.2** In case of any change in the date and time of opening of the Financial bid from what is given in the Bid Detail, the date & time for opening of the Financial Bid will be uploaded on SITRA website. Bidders are requested to visit the website (www.sitra.org.in) regularly and keep themselves informed.
- **2.3** SITRA shall examine whether the bid is complete in all respects and conform to the stipulated requirement of the technical specifications and test reports.
- **2.4** The price shall be evaluated for SPV System on the Total Price (P):- (a). System cost including GST, insurance, transportation, etc FOR at SITRA, Coimbatore, Installation & Commissioning charges including GST and (b). Comprehensive MPWC for 5 years period including GST.
- **2.5** The bidders shall be ranked L1, L2, L3 ....as per the Total Price (P). The work order will be issued to the successful bidder subject to the acceptance to supply at approved rate.
- **2.6** SITRA, if required, may at its discretion obtain clarifications on offers by requesting clarifications from any or all the bidders at any time prior to Financial Bid opening. Such request for clarification and response shall be in writing.
- **2.7** SITRA, if required, may at its discretion extend the scheduled date of opening of Financial Bid.

### 3. Zero Deviation & Rejection Criteria

- **3.1 Zero Deviation:** Deviation to terms and conditions of Tender Documents may lead to rejection of bid. SITRA will accept bids based on terms & conditions of Tender Documents only. Bidder may note SITRA will determine the substantial responsiveness of each bid to the Tender Documents. A substantially responsive Bid is one which conforms to all the terms, conditions and specifications of the Tender Documents without material deviations or reservations or omissions. SITRA's determination of a bid's responsiveness is based on the content of the bid itself without recourse to extrinsic evidence. SITRA reserves the right to raise technical and/ or commercial query(s), if required. The response(s) to the same shall be in writing, and no change in the price(s) or substance of the bids shall be sought, offered or permitted. The substance of the bid includes but not limited to prices, completion, scope, technical specifications, etc. Bidders are requested to not to take any deviation.
- **3.2 Rejection Criteria:** Notwithstanding the above, deviation to the following shall lead to summarily rejection of Bid:
  - (a) Eligibility Criteria including General, Technical and Financial Qualifying Requirements
  - (b) Firm Price
  - (c) Earnest Money Deposit
  - (d) Tender Document Fees
  - (e) Specifications & Scope of Work
  - (f) Price Schedule
  - (g) Duration/Period of Contract/Completion Schedule
  - (h) Period of Validity of Bid
  - (i) Warrantee/Guarantee/Defect Liability Period

- (j) Arbitration/Resolution of Dispute/Jurisdiction of Court
- (k) Force Majeure & Applicable Laws
- (I) Any other condition specifically mentioned in the tender document elsewhere that non-compliance of the clause leads to rejection of Bid

### 4. Award of Contract/Work Order

**4.1**The contract/work order shall be awarded to the bidder whose financial bid was acceptable and who is selected by the Tender Purchase Committee to undertake the work at the approved rate and on approval of the Director, SITRA.

### 5. Effective Date of Contract

**5.1**The effective date of commencement of execution of the order by the selected vendor shall be the date of issue of the Purchase/Work Order whichever is earlier.

### 6. Contract Price

- **6.1**The total contract price and 5 years Comprehensive MPWC, in full for the complete set including SPV module, control electronics & inverter, mechanical components, etc., should be as per format in **Appendix-20**. The price shall be for the total scope as defined in this document.
- **6.2** Income Tax/TDS shall be deducted as applicable at the existing rate.

### 7. Terms of Payment

- **7.1** 20% of the total work order value (excluding installation, commissioning and MPWC cost) shall be released as mobilization advance against the submission of Bank Guarantee of equivalent amount from a Nationalized Bank valid at least for a period of 6 months after verification. The mobilization advance so paid shall be interest bearing @12% per annum effective from the day on which advance payment is made.
- **7.2** 50% of the total work order value (excluding installation, commissioning and MPWC charges) or 70% if the mobilization advance is not taken for each bill shall be released against delivery of goods in full and in good condition:-
  - Certificate of Supply of SPP received by the consignee as specified.
  - o Commercial invoice of the supply made in triplicate.
  - o Copy of delivery challan/transportation challan/lorry receipt.
  - o Material inspection certificate.
- **7.3** Remaining 30% of the contract price (excluding installation, commissioning and MPWC charges) and 100% of installation, commissioning charges shall be paid against duly verified completion report with successful installation and commissioning of the systems and performance demonstration of the SPV system and after submission of the following documents:

- 1. Certificate of completion as specified in Appendix-19.
- 2. Details of the module and PCU/inverter utilization report of SPP installed under the SPV program as specified in **Appendix-19**.
- 3. Commercial invoice of the supply made in triplicate.
- 4. Copy of delivery challan/transportation/lorry receipt.
- 5. Verification of Certificate of Commissioning from the beneficiary countersigned by office concerned.
- 6. Photographs along with details of module, inverter/PCU, etc. installed in soft copy (CD/DVD).
- 7. All payments shall be released by SITRA through account Payee Cheque issued in favour of the Supplier/Vendor or e-payment through RTGS/account transfer as the case may be for which mandatory information is to be furnished:

Name of the firm	Name	of	Bank	Account	Type of	MICR	IFSC	PAN
to whom	bank		Branch	Number	account	Code	Code	No.
payment is to be			address					
made								

- **7.4** The vendor has to deposit @5% of the project cost (excluding MPWC) as Performance Guarantee in terms of irrevocable Bank Guarantee for the tenure of the contract including MPWC. In case the Vendor opts for withholding 5% payment in lieu of the payment, then that 5% system cost plus installation charges would be withheld for the Performance Guarantee period of 5 years. If the Solar system fails to confirm to the laid down systems specifications or any deviation/compromise has been observed in the system specifications etc., the performance guarantee deposit of the firm shall be forfeited.
- **7.5** MPWC charges shall be released in 5 equal yearly installments on satisfactory performance. The record of performance sheet shall be submitted on quarterly basis, by the 15<sup>th</sup> of the next month.

### 8. Income Tax/TDS

Without prejudice to the obligations of the Supplier/Vendor under law, any Income Tax/TDS, which SITRA may be required to deduct by law/statute, shall be deducted at source and shall be paid to the authorities on account of the Supplier. SITRA shall provide the Supplier a certificate for such deduction of tax.

### 9. Statutory Variations in Taxes and Duties

**9.1** The adjustment in the Contract Price towards imposition of new taxes or abrogation of existing taxes due to statutory variation shall be applicable only if the new tax is enacted or existing tax is abrogated within contractual delivery/execution period. For any upward variation due to enactment of new tax or abrogation of existing tax after contractual delivery/execution period, adjustment in the Contract Price shall not apply,

although for any downward variation, SITRA shall make necessary adjustment in the rate of the items.

**9.2** However, the Supplier shall bear and pay all liabilities in respect of statutory variations in taxes and duties and imposition of new taxes and duties that may be imposed after the contractual delivery/execution dates, as originally stipulated, in case the delivery dates are extended due to reasons attributable to Supplier.

### 10. Agreement

The Supplier/Vendor(s) has to enter into an agreement within 15 days, in the office of SITRA before commencement of supply/service.

### 11. Inspection of the Factory and Tests

- **11.1** SITRA reserves the right to inspect the manufacturer's works/factory to ascertain the capability/availability of necessary equipment & infrastructure required for manufacture of the item offered before opening of the Financial Bid of the bidders.
- **11.2** SITRA shall have access and right to inspect the work or any part thereof at any stage.
- **11.3** SITRA shall have the right to inspect and test the goods to confirm their conformity to the technical specifications after delivery of goods to consignee.
- **11.4** Successful bidder shall inform SITRA at least 1 week in advance of schedule dispatch.

### 12. Dispatch Instructions

All items/equipment may be subjected to pre-dispatch inspection by the authorized representative(s) of SITRA as per relative standards/provisions approved by SITRA before dispatch of items. Cost of inspection by officials (not more than two) would have to be borne by the successful bidder.

### 13. Transit Insurance:

Transit Insurance shall be arranged by the Vendor for his total supplies. In case of any damage/loss/pilferage/non-delivery during transit, the Supplier shall lodge the claim and settle the claim with the insurance agency. The Supplier shall also arrange replacement of the damaged, lost/pilfered items expeditiously pending settlement of commercial implications with insurance agency, if any, so as not to hamper the working of the system. The resultant loss if any due to failure of Supplier to comply with the above shall be to the account of the Supplier.

### 14. After Sales Service and Availability of Spare Parts

The Vendor shall depute authorized Service Engineer within 24 hrs. from the date of the intimation of fault, and establish sufficient inventory of spares, technicians in consultation with SITRA to provide satisfactory and uninterrupted services during the guarantee/MPWC period for which a servicing centre must preferably be established at

Coimbatore. Address, contact number, etc. of the Servicing centre must be submitted before commencement of the work.

### 15. Completion Schedule

The delivery of goods at FOR destination in full as per the terms and conditions of the contract/order shall be completed within two (2) weeks from the date of issue of the Work order.

### 16. Guarantee/Warranty Period

- **16.1** The manufacturer must provide guarantee which shall include servicing & replacement guarantee for parts and components (such as electronics, inverter, etc.) of SPV System for 5 (five) years as part of the MPWC. For PV modules, it must be warranted for its output peak watt capacity, which should not be less than 90% the end of 10 years and 80% at the end of 25 years from the date of commissioning the SPV System at site & demonstration of performance to SITRA.
- **16.2** The guarantee card to be supplied with the system must contain the details of the system supplied as given in the **Appendix-17**. The manufacturers can also provide additional information about the system and condition of guarantee as necessary.
- **16.3** Supplier/Vendor shall without prejudice to any other clauses of the order repair/replace the defective parts and restore the system to satisfactory working/performance within 2 (two) days of intimation of fault without any additional cost to SITRA within the period of guarantee/MPWC.

### 17. Assignment/Sub Letting/Pre Bidding Tie Up

- **17.1** The Supplier/Vendor shall not assign or sub-let manufacture, shop testing, packing & forwarding, transportation, transit insurance and supply, in whole or part, its obligations to any third party to perform under the order/contract.
- **17.2** In the event the Supplier contravenes this condition, SITRA reserves the right to reject the equipment/work sub-contracted and procure the same from elsewhere at Supplier's risk and cost. The Supplier shall be solely liable for any loss or damage which SITRA may sustain in consequence or arising out of such replacing of the contract work.
- 17.3 In case, the installation & commissioning and MPWC is planned to be carried out in collaboration with other party, the bidder has to sign MoU with the party on a Non-judicial stamp paper of value not less than Rs.100/- and submit a copy of the MoU along with the bid. The MoU shall clearly indicate division of scope of work between the prime bidder and his sub-vendor and terms of payment. However, the total responsibility of work will remain with the prime bidder.

### 18. Vendor's Subordinate staff and their Conduct

The Vendor shall be responsible for the proper behavior of all the staff, foremen, workmen, and others, and shall exercise a proper degree of control over them and in particular and without prejudice to the said generality, the Vendor shall be bound to prohibit and prevent any employees from trespassing or acting in any way detrimental or prejudicial to the interest of the community or of the properties or occupiers of land and

properties in the neighborhood and in the event of such employee so trespassing, the Vendor shall be responsible therefore and relieve SITRA of all consequent claims or actions for damages or injury or any other grounds whatsoever. The decision of the Engineer-in-Charge/Project Manager upon any matter arising under this clause shall be final. The Vendor shall be liable for any liability to SITRA on account of deployment of Vendor's staff etc. or incidental or arising out of the execution of Contract. The Vendor shall be liable for all acts or omissions on the part of his staff and Workmen and others in his employment, including misfeasance or negligence of whatever kind in the course of their work or during their employment, which are connected directly or indirectly with the Contract.

### 19. Safety Codes

- **19.1** The Vendor shall at his own expense arrange for all the safety provisions as per safety codes of C.P.W.D., Indian Standards Institution. The Electricity Act, and any other such other acts as applicable, in respect of all labour, directly employed in the Work for the performance of Vendor's part of this agreement,
- **19.2** The Vendor shall observe and abide by all fire and safety regulations of SITRA. Before starting work, Vendor shall consult with SITRA's Engineering Department and must make good to the satisfaction of SITRA any loss or damage due to fire to any portion of the work done or to be done under this agreement or to any of SITRA's existing property.
- **19.3** Vendor shall maintain first aid facilities for its employees and those of its Sub-Vendor.
- **19.4** Smoking within the campus is strictly prohibited. Violators of the no smoking rules shall be discharged immediately.

### 20. Liquidated Damages for Delay in Completion

- **20.1** The completion period for the assignment must carefully be worked out and all resource & work planning is to be done accordingly with flexibility for adjustments.
- **20.2** If the Supplier fails in the due performance of the contract to deliver and commission any part of the equipment or complete the work within the scheduled date for any reason other than due to Force Majeure conditions or any extension thereof granted to him by SITRA, he shall be liable to pay to SITRA as pre-agreed liquidated damages but not by way of penalty on account of delayed successful commissioning, a sum equal to 0.5% of total contract value for each week of such delay, or part thereof, subject to maximum of 3% of the Total Contract Value.
- **20.3** The liquidated damages for delayed completion shall be recovered from the Supplier's Bill/Bank Guarantee deposited as earnest money.
- **20.4** Deduction/payment of liquidated damages shall in no way relieve the Supplier from his contractual responsibility to complete the works.

### 21. Failure by the Vendor to comply with the provisions of the Contract

- **21.1** If the Vendor refuses or fails to execute the Work or any separate part thereof with such diligence as will ensure its completion within the time specified in the Contract or extension thereof or fails to perform any of his obligation under the Contract or in any manner commits a breach of any of the provisions of the Contract it shall be open to SITRA at its option by written notice to the Vendor:
- (a) To determine the event in which the Contract shall stand terminated and shall cease to be in force and effect on and from the date appointed by SITRA on that behalf, whereupon the Vendor shall stop forthwith any of the Vendor's work then in progress, except such work as SITRA may, in writing, require to be done to safeguard any property or work, or installations from damage, and SITRA, for its part, may take over the work remaining unfinished by the Vendor and complete the same through a fresh Vendor or by other means, at the risk and cost of the Vendor, and any of his sureties if any, shall be liable to SITRA for any excess cost occasioned by such work having to be so taken over and completed by SITRA over and above the cost at the rates specified in the schedule of quantities and rate/prices.
- (b) Without determining the Contract to take over the work of the Vendor or any part thereof and complete the same through a fresh Vendor or by other means at the risk and cost of the Vendor. The Vendor and any of his sureties are liable to SITRA for any excess cost over and above the cost at the rates specified in the Schedule of Rates/ Price Schedule, occasioned by such works having been taken over and completed by SITRA.
- 21.2 In such events of Clause 21.1 (a) or (b) above.
  - (a) The whole or part of the Contract Performance Security furnished by the Vendor is liable to be forfeited without prejudice to the right of SITRA to recover from the Vendor the excess cost referred to in the Clause aforesaid, SITRA shall also have the right of taking possession and utilizing in completing the works or any part thereof, such as materials, equipment and plants available at work site belonging to the Vendor as may be necessary and the Vendor shall not be entitled for any compensation for use or damage to such materials, equipment and plant.
  - (b) The amount that may have become due to the Vendor on account of work already executed by him shall not be payable to him until after the expiry of 06 (Six) calendar months reckoned from the date of termination of Contract or from the taking over of the Work or part thereof by SITRA as the case may be, during which period the responsibility for faulty materials or workmanship in respect of such work shall, under the Contract, rest exclusively with the Vendor. This amount shall be subject to deduction of any amounts due from the Contract to SITRA under the terms of the Contract authorized or required to be reserved or retained by SITRA.
- **21.3** Before determining the Contract as per Clause 21.2 (a) or (b) provided in the judgment of SITRA, the default or defaults committed by the Vendor is/ are curable and can be cured by the Vendor if an opportunity given to him, then SITRA may issue Notice in writing calling the Vendor to cure the default within such time specified in the Notice.
- **21.4** SITRA shall also have the right to proceed or take action as per Clause 21.2 (a) or (b) above, in the event that the Vendor becomes bankrupt, insolvent, compounds with his creditors, assigns the Contract in favor of his creditors or any other person or persons, or

being a company or a corporation goes into voluntary liquidation, provided that in the said events it shall not be necessary for SITRA to give any prior notice to the Vendor.

**21.5** Termination of the Contract as provided for in sub- clause 21.2 (a) above shall not prejudice or affect their rights of SITRA which may have accrued up to the date of such termination.

### 22 Vendor liable to pay compensation if

In any case in which any of the powers conferred upon SITRA by Clause 21.0 thereof shall have become action not taken under Clause 21 exercisable and the same had not been exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any further case of default by the Vendor for which by any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his Contract Performance Security, and the liability of the Vendor for past and future compensation shall remain unaffected. In the event of SITRA putting in force the power under above Clauses vested in him under the preceding clause he may, if he so desired, take possession of all or any tools, and plants, materials and stores in or upon the works or the site thereof belonging to the Vendor or procured by him and intended to be used for the execution of the Work or any part thereof paying or allowing for the same in account at the Contract rates or in case of these not being applicable at current market rates to be certified by the Engineer-in-Charge/Project Manager whose certificate thereof shall be final, otherwise the Engineer-in- Charge may give notice in writing to the Vendor or his clerk of the works, or other authorized agent, requiring him to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice), and in the event of the Vendor failing to comply with any such requisition, the Engineer-in-Charge/Project Manager may remove them at the Vendor's expense or sell them by auction or private sale on account of the Vendor and at his risk in all respects without any further notice as to the date, time or place of sale and the certificate of the Engineer-in-Charge/Project Manager as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the Vendor.

### 23 Termination of Contract

- **23.1** SITRA will be at liberty to terminate in part or full the awarded contract without prejudicing its rights and affecting the obligations of the Vendor by giving seven (7) days notice in writing in the following events:
  - (a) If the Supplier/Vendor is found defaulter for delayed supply or failure to deliver satisfactory performance or supply of substandard material pursuant to contract conditions.
  - (b) If the Supplier/Vendor fails to comply with the provision(s) of the contract including the responsibilities to fulfill the 5 years maintenance and performance warrantee contract as per the provisions mentioned in this bid document.
  - (c) If the Supplier/Vendor is involved in any action of moral turpitude.

### **23.2** Termination of Contract in Case of Liquidation/Bankruptcy etc.

If the Vendor shall dissolve or become bankrupt or insolvent or cause or suffer any receiver to be appointed of his business of any assets thereof compound with his Creditors, or being a corporation commence to be wound up, not being a member's voluntary winding up for the purpose of amalgamation or reconstruction, or carry on its business under a Receiver for the benefits of its Creditors any of them, SITRA shall be at liberty:- To terminate the contract forthwith upon coming to know of the happening of any such event as aforesaid by notice in writing to the Vendor or to give the Receiver or liquidator or other person, the option of carrying out the contract subject to his providing a guarantee up to an amount to be agreed upon by SITRA for due and faithful performance of the contract.

**23.3** Termination of Contract for Non-Performance and Subsequently Putting the Vendor on Banning List:

In case of termination of Contract herein set forth (under Clause 21) except under conditions of Force Majeure and termination after expiry of contract, the Vendor shall be put under Banning List [i.e. neither any enquiry will be issued to the party by SITRA against any type of tender nor their offer will be considered by SITRA against any ongoing tender(s) where contract between SITRA and that particular Vendor (as a bidder) has not been finalized] for a period as decided by SITRA to such Vendor.

### 24 Arbitration

- **24.1** All disputes or differences, whatsoever, arising between the parties out of or in relation to the construction, meaning and operation or effect of this contract or breach thereof shall be settled amicably.
- **24.2** If, however, the parties are not able to resolve them amicable, the same shall be settled by arbitration in accordance with the Rules of Arbitration of the Indian Council of Arbitration and Conciliation & Arbitration Act 1996 and the award in pursuance thereof shall be binding on the parties.
- **24.3** The venue of arbitration proceeding shall be within Jurisdiction of Court of Law at Coimbatore only.
- **24.4** Work under this contract shall be continued by the Supplier during the arbitration proceedings, unless otherwise directed in writing by SITRA or unless matter is such that the work cannot possibly be continued until the decision of the Arbitrator is obtained.

### 25. Settlement of disputes (Provision regarding applicable laws and settlement of disputes)

- **25.1** Unless otherwise specified, the matters where decision of the Engineer-in-Charge is deemed to be final and binding as provided in the Agreement and the issues/ disputes which cannot be mutually resolved within a reasonable time, all disputes shall be settled in accordance with the Conciliation Rules.
- **25.2** Any dispute(s)/ difference(s)/ issue(s) of any kind whatsoever between/ amongst the Parties arising under/ out of/ in connection with this contract shall be settled in accordance with the laid down rules.
- **25.3** In case of any dispute(s)/ difference(s)/ issue(s), a Party shall notify the other Party (s) in writing about such a dispute(s)/ difference(s)/ issue(s) between/ amongst the Parties and that such a Party wishes to refer the dispute(s)/ difference(s)/ issue(s) to Conciliation. Such Invitation for Conciliation shall contain sufficient information as to the dispute(s)/ difference(s)/ issue(s) to enable the other Party(s) to be fully informed as to the nature of the

dispute(s)/ difference(s)/ issue(s), the amount of monetary claim, if any, and apparent cause(s) of action.

- **25.4** Conciliation proceedings commence when the other Party(s) accept(s) the invitation to conciliate and confirmed in writing. If the other Party(s) reject(s) the invitation, there will be no conciliation proceedings.
- **25.5** If the Party initiating conciliation does not receive a reply within thirty days from the date on which he/she sends the invitation, or within such other period of time as specified in the invitation, he/she may elect to treat this as a rejection of the invitation to conciliate. If he/she so elects, he/she shall inform the other Party(s) accordingly.
- **25.6** Where Invitation for Conciliation has been furnished, the Parties shall attempt to settle such dispute(s) amicably under Part-III of the Indian Arbitration and Conciliation Act, 1996. It would be only after exhausting the option of Conciliation as an Alternate Dispute Resolution Mechanism that the Parties hereto shall go for Arbitration. For the purpose of this clause, the option of 'Conciliation' shall be deemed to have been exhausted, even in case of rejection of 'Conciliation' by any of the Parties.
- **25.7** The cost of Conciliation proceedings with regard to Airfare, Local Transport, Accommodation, shall be borne by individual parties themselves while the cost towards conference facility and fees for Conciliator(s), shall be borne by the Parties equally.
- **25.8** The Parties shall freeze claim(s) of interest, if any, and shall not claim the same during the pendency of Conciliation proceedings. The Settlement Agreement, as and when reached/agreed upon, shall be signed between the Parties and Conciliation proceedings shall stand terminated on the date of the Settlement Agreement.
- **25.9** In the event of any dispute or difference arising out of or in connection with this Purchase Order/Supply, such dispute or difference shall be settled amicably by mutual consultants or through the good offices of the respective parties. If such resolution is not possible, then the unresolved dispute or difference shall be referred to the Sole Arbitrator appointed in accordance with provisions of the ICADR Arbitration Rules, 1996 of the International Center for Alternative Dispute Resolution, New Delhi. The Arbitration shall be conducted in India in accordance with the Rules & Procedures of the Arbitration and Conciliation Act of 1996 or any re-enactment or modification thereof. The decision of the Arbitrator shall be final and binding upon the parties and the expenses for the arbitration shall be paid as may be determined by the Arbitrator.
- **25.10** In the event of any dispute or difference relating to the interpretation and application of the Supply, such dispute or difference shall be settled amicably by mutual consultations of the good Offices of the respective parties. If such a resolution is not possible, then the unresolved dispute or difference shall be referred to the Sole Arbitrator appointed in the SITRA under the Permanent Machinery for Arbitration.
- **25.11** Pending the submission of and/or decision on a dispute, disagreement, difference, claim or question or until the Arbitral award is published; the Parties shall continue to perform

all of their obligations under this Purchase Order/Supply without prejudice to a final adjustment in accordance with such award.

### 26. Force Majeure

- **26.1** Should at any time during the continuance of the contract the performance in whole or in part of any obligations by either party under this contract be held up by reasons of any war, hostility, acts of foreign enemy, civil commotion, sabotage, fires, floods, earthquakes, explosions, epidemics, cyclones, quarantine restrictions, Governmental regulations, law & order and other proclamation etc. (hereinafter referred to as "Events") then, provided notice of the happening any such eventuality is given by either party to the other within 15 days from the date of occurrence thereof neither party shall, by reasons of such eventuality, be entitled to terminate this contract, nor shall either party have claim for damages against the other in respect of such non-performance or delay in performance, and the work under this contract shall be resumed as soon as practicable after such eventuality has come to an end or ceased to exist.
- **26.2** Should one or both the parties be prevented from fulfilling their contractual obligations by a state of force majeure, lasting continuously for a period of at least four (4) weeks, the two parties should consult each other regarding the further implementation of the contract.
- **26.3** The above-mentioned force majeure condition/clause shall also apply in the works of sub-contractors/suppliers of the vendor.
- **26.4** However, the Supplier shall not be liable for liquidated damages or termination/cancellation of order/contract if and to the extent that its delay in performance or other failure to perform its obligations under the contract is the result of an event of force majeure.

# **Chapter 6 - Technical Specifications**

## Design, Supply, Installation and Commissioning of 100 KWp Solar Photo Voltaic Roof Top System at SITRA Building, Coimbatore

Electrical and Installation details of SITRA				
Name of the company	The South India Textile Research Association (SITRA)			
Address	13/37, Avinashi road Civil Aerodrome post Coimbatore – 641 014 Tamilnadu			
HTSC No	177 CEDC/METRO, IIA			
Sanctioned demand	250 KVA			
Maximum demand reached	245 KVA			
Average daily power consumption  Day ( 09.00Am to 5.00pm)  Night (05.00pm to 09.00am)  Total power consumption	1500 units 1000 units 2500 units			
Average power consumption on Sunday	750 units			
Transformer details Capacity Voltage	500 KVA with OLTC 11 KV / 433V			
Generator Details 380KVA Diesel Genset 160KVA Diesel Genset	1 no. 1 no.			
Roof top area available for solar installation	1250 Sq.m / 13485 Sq.ft			
Number of floor	1 <sup>st</sup> floor and 2 <sup>nd</sup> Floor			
Height of parapet wall	0.75 m			

## Solar PV System shall consist of following equipments/components:

- Solar PV modules consisting of required number of crystalline PV modules.
- Grid interactive Power Conditioning Unit with Remote Monitoring System.
- Mounting structures and civil structures.
- Junction Boxes.
- Earthing

Technical specification of 100KW Solar PV				
	Poly Crystalline			
	The peak power output of the PV Module shall be min 340Wp under STC			
	Module open circuit voltage (Voc) in shall be minimum 46V			
	Module efficiency should be more than 16%			
	PV modules must be tested and approved by one of the IEC authorized test centers and shall be PID resistant.			
Solar Module specification	PV modules used in solar system must be warranted for output wattage, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years			
	The rated maximum power rating of PV modules should have positive tolerance in range of 0 to +3%. Vendor shall submit test reports for the same.			
	EVA used for modules shall be UV resistant in nature with gel content of more than 70%. Back sheet used in module shall have a minimum thickness of 300micron with water vapor transmission rates of less than 2g/m2/day (38 deg C at 90%RH). Back sheet can be fluoro polymer based. Any deviation is subject to approval from SITRA. Vendor shall provide necessary test reports			
	Output cable shall be an approved solar grade cable, UV protected of size 4 sq mm			
Solar Module	Module frame shall be made of corrosion resistant material preferably having aluminium anodized finish of 15 micron or more			
specification	Module Junction Box shall be of high quality IP65 or better with Bypass diodes.			
	Certificate compliance; IEC 61215, IEC 61730; IEC 61701. Shall be BIS compliant. Vendor shall submit IEC and BIS test reports.			

The array structure design and specification to be approved by SITRA

Random samples from MMS shall be collected and tested for galvanization/anodization thickness. If thickness does not meet provided specifications, same shall be rejected. Additional cost shall be borne by the vendor

Hot dip galvanized MS mounting structures may be used for mounting the modules / panels / arrays. Minimum thickness of galvanization should be at least 80 microns.

The Mounting structure shall be so designed to withstand the wind speed of 120km/hr where PV system is proposed to be installed. It may be ensured that the design has been certified by a recognized Lab/ Institution/ Chartered Engineer in this regard and submit wind loading calculation sheet to SITRA. Suitable fastening arrangement should be provided to secure the installation against the specific wind speed of 120km/hr

## Module Mounting and structures

The mounting structure steel shall be as per latest IS 2062: 1992

Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, and nuts and bolts of grade SS 316.

Aluminium structures also can be used which can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided by anodization.

The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module.

The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m2. Vendor shall provide calculations for the same.

Minimum clearance from roof to module(bottom most point) shall be minimum 300mm.

	String Inverters
	3 x 30KW
	Make; SMA or ABB
	Inverter efficiency should be >98% at full load
	No load losses < 1% rated power
	Nominal AC output voltage and frequency:4 15V, 3Phase, 50Hz Outputfrequency : 50Hz
	Grid Frequency Synchronization range : +3Hz
Inverters	Power factor : > 0.9
	THD : < 3%
	Location /Environmental class : Outdoor type with IP65 protection
	Protection required: Over/Under voltage, Frequency, DC reverse polarity, Anti-islanding
	Built-in meter and data logger to monitor plant performance through external computer shall be provided.
	Suitable mechanized arrangement shall be made for mounting of inverter with proper shading
	DC cables used from PV module to DCDB shall be SOLAR approved XLPE copper cable of minimum 4 sqmm size
	Make : Lapp/Leoni/Siechem/Apar
	1.1Kv grade, XLPE, copper conductor of size with suitable size and number of cores for DC Solar cable from DCDB to inverter
DC Cable	Make : Lapp/Leoni/Siechem/Apar
	1.1KV Grade, Heavy duty aluminium conductor/Copper conductor, XLPE Armored with suitable size and number of cores
	Make : Havells / polycab.
	If aluminum conductors are used, bi-metallic lugs shall be used to
	have copper on inverter side & ACDB side. Armor shall be earthed.
	Remote monitoring with web based data loggers to monitor the following parameters
	AC/DC parameters
DC and Control	Solar Irradiance
cables	Module
	Ambient temperature
	Performance Ratio

	Plant faults
Weather Monitoring Station AC Power cable plant Data Monitoring	Pyranometer and temperature sensor shall be installed and parameters shall be displayed in monitoring
	GI perforated tray should be of adequate size and arise of space congestion should be avoided
	The cables have to be neatly dressed and should be differentiated from each other using unique color code procedures and ferrules with clear name marking
Cable Tray	Trays should be supported with GI L angle structure made of GI with adequate height to avoid water stagnation
	The power, data and control cables has to be separated in the cable tray. Magnetic shielded cables have to be used and any kind of noise, magnetic interference and electrical induction issues should not be allowed to rise aftermath and necessary protections, precautions have to be taken during planning itself. Shield shall be earthed properly.
	Wherever necessary, conduits shall be used for mechanical protection of cables.
	AC panel board shall control & combine the AC power output from the inverter and should have necessary surge arrestors & isolators in the form of MCB/MCCBs.
	DC panel to receive the DC output from the each array / string. It is dust and vermin proof conform to IP 65 protection. Suitable capacity PV grade MCBs / MCCB shall be provided for isolating each string for controlling the DC Power input to the PCV along with necessary PV grade surge arrestors of 3 Metal Oxide Varistor type. GPV fuses shall be installed wherever necessary as per module manufacturer recommendation.
AC & DC Distribution Box	All Male-Female connector should be MC4 compatible with suitable fuse rating as per module manufacturer recommendation. Same makes shall be used while connecting two connectors.
	Vendor must take approval/ NOC from TANGEDCO for the connectivity, technical feasibility and connectivity with EB Grid before commencement of site work. Vendor shall obtain CEIG approval also for the same.
	AC power cables from AC panel of solar shall be terminated near to the panel in solar array
	Suitable switch gear arrangement in MV panel shall be arranged by SITRA after written communication from vendor regarding requirements.

	Type : Chemical earth pit					
	Size : 50mm dia x 3 meters copper with back filling					
Earthing	Earth resistance shall not be more than 1 ohms					
	Earthing for all equipment shall be as per manufacturer recommendation.					
Guarantee and Warranty information	The components which carries guarantee and warrantee should be specified separately and the date of commissioning will be considered as the commencement date of Guarantee period.  Warranty and Guarantee Certificates shall be in name of SITRA.					
Documentation	<ul> <li>An operation, instruction, maintenance manual in English should be provided with the SPV System regarding the following:</li> <li>(a) About Photo voltaic</li> <li>(b) About SPV System—its components and expected performance</li> <li>(c) About PV Module. In case of imported modules it is mandatory to provide a copy of the international product qualification certificate from the test centre</li> <li>(d) About PCU/Inverter. The make, model number and technical characteristics of PCU/Inverter should be stated in the product data sheet from the test centers</li> <li>(e) Clear instructions about Mounting of PV Module(s)</li> <li>(f) All Electronic components/equipment used in the SPV system</li> <li>(g) DO's and DON'Ts</li> <li>(h) Clear instructions on operation, Regular Maintenance and Trouble Shooting of SPV System</li> <li>(i) Name and address of the person or service center to be contacted in case of failure or complaint.</li> </ul>					

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#### **COVERING LETTER**

(The Covering Letter should be submitted on the Letter Head of the Bidding Company)

	Date :
Ref. No	
The Director The South Inc 13/37, Avinashi Coimbatore – 64 Tamilnadu	
	d for Design, Supplying, Installation & Commissioning of 100KWp ar Photo Voltaic Roof Top System at SITRA, Coimbatore, Tamilnadu
Dear Sir,	
understood in Erection, Testin Coimbatore, Ta Financial Bid. V	ndersigned [insert name of the 'Bidder'] having read, examined and detail the tender Document for "Design, Engineering, Supply, Construction, ng & Commissioning of 100KWp Roof Top Photo Voltaic Solar System at SITRA, amilnadu" hereby submit our Bid comprising of Techno Commercial Bid and We confirm that neither we nor any of our Parent Company/ Affiliate/Ultimate my has submitted Bid other than this Bid directly or indirectly in response to ender.
documents attamended. As initialed by us	our unconditional acceptance to the tender, dated and tender tached thereto, issued by The South India Textile Research Association, as a token of our acceptance to the tender documents, the same have been and enclosed to the Bid. We shall ensure that we execute such tender per the provisions of the tender and provisions of such tender documents shall us.
3. Bid Capacity We have bid for	r the capacity ofKWp
of Bank Guara date of bank gr and valid up t	oney Deposit used an Earnest Money Deposit of INR (Insert Amount), in the form untee no (Insert reference of the bank guarantee) dated (Insert uarantee) as per Appendix 11 from (Insert name of Bank providing BG) to and including in terms of Clause of this tender. The offered ower by us is KWp. (Insert total capacity offered).
conditions and format(s).	submitted our Price Bid strictly as per this tender, without any deviations, without mentioning any assumptions or notes for the Price Bid in the said
	we are a Successful Bidder, we shall furnish a declaration at the time of

future any Incentive other than received from SITRA for implementation of the project.

7. Acceptance

We hereby unconditionally and irrevocably agree and accept that the decision made by The South India Textile Research Association in respect of any matter regarding or arising out of the tender shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process.

We confirm that there are no litigations or disputes against us, which materially affect our ability to fulfill our obligations with regard to execution of projects of capacity offered by us.

#### 8. Familiarity with Relevant Indian Laws & Regulations

We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this Bid and execute the tender documents, in the event of our selection as Successful Bidder. We further undertake and agree that all such factors as mentioned in tender have been fully examined and considered while submitting the Bid.

#### 9. Contact Person

Details of the contact person are furnished as under:

Name :
Designation :
Company :
Address :
Phone No. :
Fax No. :
Email :

11. We are enclosing herewith the Envelope-I (Covering Letter, EMD, Techno-Commercial documents etc. as per and Envelope II (Financial Bids), duly signed formats, each one duly sealed separately, in one original as desired by you in the tender for your consideration.

It is confirmed that our Bid is consistent with all the requirements of submission as stated in the tender and subsequent communications from The South India Textile Research Association. The information submitted in our Bid is complete, strictly as per the requirements stipulated in the tender and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid. We confirm that all the terms and conditions of our Bid are valid for acceptance for a period of 365 (Three Hundred and Sixty Five Days) from the date of opening of "Financial Bid (Envelope-II)". We confirm that we have not taken any deviation so as to be deemed non-responsive.

Dated the	day of	, 2019
Thanking you,		
We remain,		
Yours faithfully,		

NOTE: Name, Designation and Signature of Authorized Person in whose name Power of Attorney/ Board Resolution/ Declaration. Copy of Power of Attorney/ Board Resolution/ Declaration should be enclosed along with Covering Letter.

#### INFORMATION ABOUT THE BIDDING FIRM

Tender No.: Date:

S.no	Particulars				
1.	Name of the Bidder				
2.	Address of Bidder with Tele	phone, Fax, email			
3.	Address of the Registered O	ffice			
4.	Address of the works				
5.	GPS Co-ordinate of Register	ed Office			
6.	GPS Co-ordinate of Factory	Campus			
7.	Name & Designation of A Signatory for Corresponden				
8.	Nature of Firm (Proprietorship/Partnership /Pvt. Ltd./Public Ltd. Co./Public Sector)				
9.	Permanent Account Numbe	r (PAN)			
10.	Firm's Registration Number				
11.	EPF Registration No. (if applicable)				
12.	GST Registration Number				
13.	Specify the Item Originally Manufactured				
14.	Year of Starting of Manufacturing/ Assembling of PV Component(s)				
15.	Installed Capacity for Sola Components/Plant	r Products/			
16.	Total Production and		Production	Sales	
	Sale of PV Products During the Last Three	2015-16			
	Years (in Rupees)	2016-17			
47	Name of Material and Made	2017-18			
17.	Name of Material and Model Type Offered				
18.	Name of Manufacturer of SI	PVs with Full Address			
	1 SPVs				
	2 PV Module				
	3 Control Electronics/Inver	ter/PCU			
	4 Others				

19.	Particulars of Earnest Money Deposit	
20.	Quantity Quoted for Solar Power plant	
21.	Name of the Test Center where the testing of Components of SPV has been performed	
22.	Test Report No. of components SPV mentioning date of test	
23.	Specify MNRE specification as in the test report	
24.	Place where Materials will be Manufactured	
25.	Place where Materials will be Available for Inspection	
26.	Whether the Bidder has submitted details with regard to supplies made to important organizations.	
27.	Details of any existing service network in Coimbatore (Name & address of service centre)	
28.	Other details and remarks, if any	

Yours faithfully,

(Signature of Authorized Signatory)

Name :

Designation :

Company seal :

(Separate sheet may be used for giving detailed information in seriatim duly signed. This form must be submitted duly signed in case separate sheet is submitted)

#### **AUTHORITY LETTER FOR SIGNING BID DOCUMENT & ATTENDING BID OPENING MEETING**

Tender No.:	Date:
To, The Director, The South India Textile Research Association 13/37, Avinashi Road Civil Aerodrome Post Coimbatore – 641014	
Sub: Authority Letter for Attending Pre-Bid Mee Document.	ting, Bid Opening Meeting & Signing Bid
I hereby authorize	(Name &
Designation) to attend the Pre-Bid Meeting / Bid	Opening Meeting & sign the Bid Document
(tick wherever applicable or tick both, if on at SITRA on behalf of our com	
He is also authorized to provide clarifications/c confirmations shall be binding on theis attested below.	confirmations, if any, and such clarifications/ company. The specimen signature of
(Specimen Signature)	(Signature of Authorized Signatory)
Name :	Name :
Designation :	Designation: Company seal
Yours faithfully,	
(Signature of Authorised Signatory) Name :	
Designation: Note:	

- 1. To be submitted by bidders on official letter head of the company.
- 2. Authorization can be for more than one person or different person/s for Pre-Bid Meeting and Bid Opening Meeting.

Tender No.:

#### **DETAILS OF ORDERS RECEIVED AND EXECUTED IN PAST YEARS**

Details of Orders Received & Executed by the Manufacturer/Supplier for Supply of SPV System during

Date:

S.No.	Name of the Agency/Organisation	Order No., Date & Qty	Capacity	Delivery Schedule	Qty supplied within delivery schedule	Qty supplied after delivery schedule	Date of full supply
1							
2							
3							
4							
5							
Add mor	re rows if needed						
Yours faithfully,							
(Signature of Authorised Signatory) Name : Designation : Company Seal							
Note:  (i) Attach photocopies of purchase orders							

(ii) Attach photocopies of Certificate of Satisfactory Performance issued by concerned Organisation (iii) Separate sheet may be used for giving detailed information in seriatim duly signed. This form must be

submitted duly signed in case separate sheet is submitted

#### **NO DEVIATION CERTIFICATE**

(To be submitted on the Letter Head of the Bidding Company)

Ref.No.	Date:
To The Director The South India Tex 13/37, Avinashi Roa Coimbatore – 641 ( Tamilnadu	
Sub:	Bid for Design, Supplying, Installation & Commissioning of 100KWp Solar Photo Voltaic Roof Top System at SITRA, Coimbatore, Tamilnadu
Dear Sir,	
therefore, certif	that any 'deviation/ exception' in any form may result in rejection of bid. We by that we have not taken any 'exception/ deviation' anywhere in the bid and any 'deviation/ exception' is mentioned or noticed, our bid may be rejected.
(Signature of Au Name Designation Company seal	thorized Signatory of Bidder)
Place: Date:	

#### DECLARATION REGARDING BANNING, LIQUIDATION, COURT RECEIVERSHIP, ETC.

(To be submitted on the Letter Head of the Bidding Company)

To
The Director
The South India Textiles Research Association
13/37, Avinashi Road
Coimbatore – 641 014
Tamilnadu

Sub: Bid for Design, Supplying, Installation & Commissioning of 100KWp
Solar Photo Voltaic Roof Top System at SITRA, Coimbatore, Tamilnadu

Dear Sir,

We hereby confirm that we are not on Banning List by SITRA or by any Government department/ Public Sector due to "poor performance" or "corrupt and fraudulent practices" or any other reason on the due date of submission of bid.

Further, we confirm that neither we nor our allied agency/(ies) (as defined in the Procedure for Action in case of Corrupt/ Fraudulent/ Collusive/ Coercive Practices) are on banning list of SITRA or the Ministry of New & Renewable Energy.

We also confirm that we are not under any liquidation, court receivership or similar proceedings or 'bankruptcy'.

In case it comes to the notice of SITRA that we have given wrong declaration in this regard, the same shall be dealt as 'fraudulent practices' and action shall be initiated as per the Procedure for action in case of Corrupt/Fraudulent/Collusive/Coercive Practices.

Further, we also confirm that in case there is any change in status of the declaration prior to award of contract, the same will be promptly informed to SITRA by us.

(Signature of A	authorized Signatory of Bidder)
Name	:
Designation	:
Company seal	
Place:	
Date:	

## FORMAT OF CHARTERED ACCOUNTANT CERTIFICATE FOR FINANCIAL CAPABILITY OF THE BIDDER

(To be submitted on the Letter Head of the Chartered Accountant)

Ref. No.	Date:				
To The Director The South India Textiles Research Association 13/37, Avinashi Road Coimbatore – 641 014 Tamilnadu					
Sub: Bid for Design, Supplying, Installation & Con Solar Photo Voltaic Roof Top System at SITI					
Dear Sir,					
We have verified the Annual Accounts and other relevant records of M/s(Name of the bidder) and certify the following.					
Further, we certify that the Financially Evaluated E	ntity (s) had an Annual Turnover				
A. ANNUAL TURNOVER OF LAST 3 YEARS:					
Year	Amount (in INR)				
Year 1:					
Year 2:					
Year 3:					
And					

Net worth (strike out whichever is not applicable) of INR.......Crore computed as per instructions provided in this tender based on unconsolidated audited annual accounts as per last FY. (FY 2017-18 or 2018-19) Please mark tick whichever is used

#### B. FINANCIAL DATA FOR LAST AUDITED FINANCIAL YEAR:

Description	Year
	Amount (In INR)
1. Current Assets	
2. Current Liabilities	
3.Working Capital (Current Assets- Current liabilities)	
4. Net Worth (As mentioned under Annexure to BDS)	

Yours faithfully

(Signature and stamp (on each page) of Authorized Signatory of Bidding Company.

Name:
Date:
Place:

Signature and stamp (on each page) of Chartered Accountant/Statutory Auditors of Bidding

Company.

Name: .....

Date: .....

Place: .....

#### Note:

Audited consolidated annual accounts of the Bidder may also be used for the purpose of financial criteria provided the Bidder has at least 50% equity in each company whose accounts are merged in the audited consolidated accounts and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered again for the purpose of evaluation of the Bid.

#### **FORMAT FOR JOINT VENTURE AGREEMENT**

(To be stamped in accordance with Stamp Act, the Non-Judicial Stamp Paper of Appropriate Value should be in the name of the Joint Venture)

Know all men by these presents that we,and							
Whereas The South India Textile Research Association (hereinafter referred to as "SITRA") has invited tenders from the interested parties for (hereinafter referred to as "the contract").							
Whereas the members of the Joint venture are interested in bidding of the work of							
This Joint Venture agreement is executed to undertake the work and role and responsibility of the firms are (role and responsibilities of each firm for administrative arrangement for management and execution of contract) and (name of the person) of (name of the firm) and (name of the person) and (name of the firm) are the authorized representative of respective firms.							
As whereas it is necessary under the tender conditions for the member of the Joint venture to appoint and authorize one of them as Lead firm to do all acts, deeds and things in connection with the aforesaid tender.							
We hereby nominate and authorize as our constituted attorney in our name and on our behalf of to do or execute all or any of the acts or things in connection with the execution of this Tender and thereafter to do all facts, deeds and things on our behalf and thereafter till the satisfactory completion of work.							
And we hereby agree that all acts, deeds and things done by our said attorney shall be construed as acts, deeds and things done by us and we undertake to ratify and conform all and whatsoever that my said attorney shall do or cause to be done for us by virtue of the power hereby given.							
In witness hereof, we have signed this deed on this the day of 2019.							
D SEALED & DELIVERED By the with namedeys in the presence of	through its duly constituted						
SIGNED SEALED & DELIVERED	SIGNED SEALED & DELIVERED						
By the with named	By the with named						
through its duly constituted attorneys	through its duly constituted attorneys						
in the presence of	in the presence of						

## FORMATFOR POWER OF ATTORNEYFOR JOINT VENTURE AGREEMENT

(To be stamped in accordance with Stamp Act, the Non-Judicial Stamp Paper of Appropriate Value should be in the name of the Joint Venture)

Know all men by these presents that We,
venture" hereby appoint and authorize
Whereas The South India Textile Research Association (hereinafter referred to as "SITRA") has invited applications from interested parties for (hereinafter referred to as "the Project").
Whereas the members of the Joint venture are interested in bidding for this assignment in accordance with the terms and conditions of this Tender along with its amendments, addendum and related documents.
And whereas it is necessary for the members of the Joint Venture to appoint and authorize one of them to do all acts, deeds and things in connection with the aforesaid Project.
All the members of this consortium will be jointly and severally liable for execution of this assignment in all respects.
In Witness hereof we have signed this deed on this theday of
For and on behalf of
For and on behalf of
For and on behalf of

#### **SHAREHOLDING CERTIFICATE (for Limited Companies)**

(To be submitted on the Letter Head of the Bidder)

Name of the Equity Holder	Type and Number of Shares Owned	% of Equity Holding	Extent of Voting Rights		

Yours faithfully	
(Signature and	Stamp of Authorized Signatory of Bidder)
Name Designation	
Place Date	

(Signature and Stamp of Company Secretary/ Director/Chartered Accountant)

#### BANK GUARANTEE FOR "EARNEST MONEY DEPOSIT (EMD)"

This deed of Guarantee made on
Coimbatore on the following terms and conditions.
Whereas the Bidder is submitting its tender for <b>Design, Supply, Installation and Commissioning of 100 KWp Solar Photo Voltaic Roof Top System</b> and this guarantee is being made for the purpose of submission of Earnest Money with the tender document.
Know all people by these presents that the Guarantor, hereby undertake to indemnify and keep STRA indemnified up to the extent of Rsduring the validity of this bank guarantee and authorize SITRA to recover the same directly from the Guarantor. This bank guarantee herein contained shall remain in full force and effect till the expiry of its validity or till any extended period (if extended by the bank on receiving instruction from BIDDER.). The liability under the guarantee shall be binding on the Guarantor or its successors.
Whereas the Guarantor further agrees that their liability under this guarantee shall not be affected by any reason of any change in the offer or its terms and conditions between the BIDDER and SITRA with or without the consent or knowledge of the Guarantor.
Whereas the Guarantor further agrees to pay guaranteed amount hereby under or part thereof, on receipt of first written demand whenever placed by SITRA during the currency period of the guarantee. The Guarantor shall pay SITRA immediately without any questing, demure, reservation or correspondence.
Whereas the Guarantor hereby agrees not to revoke this guarantee bond during its currency period except with the previous consent of SITRA in writing.
Notwithstanding anything contained herein
<ol> <li>Our liability under this bank guarantee shall not exceed Rs</li> <li>This Bank guarantee shall be valid up to</li> </ol>
3. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only against the written claim or demand on or before Sealed with the common seal of the bank on this day of Month and Year
Witness:
1
2
(Signature and seal of Bank)

#### FORMAT OF BANK GUARANTEE FOR CONTRACT PERFORMANCE SECURITY

(To be stamped in accordance with Stamp Act, the Non-Judicial Stamp Paper of Appropriate Value and should be in the name of the issuing Bank)

	Date
	Contract No
	Name of Contract] Design, Supply, Installation and Commissioning of 100 KWp Solar Photo Voltaic Roof Top System
	То
	The Director
	The South India Textile Research Association
	13/37, Avinashi Road
	Coimbatore – 641 014
	Tamil Nadu
	Dear Sir,
1.	In consideration of the Director representing "SITRA" having agreed to exempt (hereinafter called "said Vendors") from the demand, under the terms and conditions of contract awarded in No
2.	We*(hereinafter referred to as the Bank) at the request of Vendor(s) do hereby undertake to pay to the Port an amount not exceeding Rs. against any loss or damage caused to or suffered or would be caused to or suffered by the Port by reason of any breach by the said Vendor(s) of any of the terms and conditions contained in the said Agreement.
3.	We do hereby undertake to pay the amounts due payable under this Guarantee without any demur, merely on a demand from the Port stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Port by reason of any breach by the said Vendor(s) of any of the terms and conditions contained in the said Agreement or by reason of the Vendor(s) failure by perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However our liability under this Guarantee shall be restricted to an amount not exceeding Rs
4.	We undertake to pay to the Port any money so demanded notwithstanding any dispute or disputes raised by the Vendor(s) in any suit or proceedings before any Court of Tribunal relating thereto our liability under this present being absolute and unequivocal.
5.	The payment so made by us under this bond shall be valid discharge of our liability for payment there

under and the Vendor(s) shall have no claim against us for making such payment.

- 6. We further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Port under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till SITRA certified that the terms and condition of the said Agreement have been fully and properly carried out by the said Vendor's and accordingly discharges this Bank Guarantee. Unless a demand or claim under this Guarantee is made on us in writing within three months from the date of expiry of the validity of the Bank Guarantee period we shall be discharged from all liability under this Guarantee thereafter provided further that the Bank shall at the request of the Port but at the cost of Vendor(s) renew or extend this Guarantee for such further period or periods as the Port may require.
- 7. We further agree the Port, that the Port shall have the fullest liberty without consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Vendor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Port against the said Vendor(s) or for any forbearance, act or omission on the part of the Port or any indulgence by the Port to the said Vendor(s) or by any such matter or thing whatsoever which under the Law relating to sureties would but for this provision, have effect of so relieving us.
- 8. This Guarantee will not be discharged due to the change in the constitution of the Bank or the Vendor(s)
- 9. We lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the Port in writing.

10.	This	guarantee	is valid	up	to	 (period)	dated	the	 day	of	2019
	for			**	:						

<sup>\*</sup> Name of the Bank

<sup>\*\*</sup> Period or date.

#### FORMAT OF BANK GUARANTEE FOR ADVANCE PAYMENT

(To be stamped in accordance with Stamp Act, the Non-Judicial Stamp Paper of Appropriate Value should be in the name of the issuing Bank)

Bank Guarantee No.:	Date:
Contract No	
[Name of Contract]	
То:	
The Director	
The South India Textile Research Association	
13/37, Avinashi Road	
Coimbatore – 641 014	
Tamilnadu	
Tallillauu	
Dear Sir,	
We refer to the Contract ("the Contract") signed of between you and M/s	(or) vide notification of award tion of award) by you to M/s having its Principal place of business at and Registered Office at (Registered
address of Vendor)	
(Indicate brief scope of work)	
Design, Supply, Installation and Commissioning System.	·
Whereas, in accordance with the terms of the said C to the Vendor an interest bearing Advance Payme guarantee for an amount of (Amount of 110% of the amount of Advance Payment.	ent against furnishing of an irrevocable bank
By this letter, we, the undersigned, (insert nan	ne & address of the issuing hank) a Rank
(which expression shall include its successors, admunder the laws of	ninistrators, executors and assigns) organized g its Registered/ Head Office at (insert o hereby irrevocably guarantee repayment of and words)upon the first demand of
the without cavil or argument in the event that	
obligations under the terms of the said Contract for	reasons whatsoever.
Provided always that the Bank's obligation shall be or an amount equal to the outstanding balance of t on the Advance Payment, taking into account suc Vendor from time to time in accordance with the certified by you.	he Advance Payment and the accrued interest ch amounts, which have been repaid by the

This Guarantee shall remain in full force from the date upon which the said Advance Payment is received by the Vendor up to sixty (60) days beyond the date of Final Commissioning of the project i.e., up to sixty (60) days beyond the date of Completion of the Facilities under the Contract. This Guarantee may be extended from time to time, as may be desired by M/s The South India Textile Research Association on whose behalf this Guarantee has been issued.

	ee must be received by the Bank during its period of e date of Final commissioning of the project by SITRA (y).
Notwithstanding anything contained herein:	
	hall not exceed Rs(value in figures)
2. This Bank Guarantee shall be valid upto .	(validity date)
	nount or any part thereof under this Bank Guarantee lemand on or before (validity date).
	For and on behalf of the Bank
	[Signature of the authorised signatory(s)]
	Signature
	Name Designation
	POA Number
	Contact Number(s): Tel.  Mobile_Fax Number  email
	Common Seal of the Bank
Witness: Signature	
Name Address	
Contact Number(s): Tel.  Mobile email	
Note:	

- 1. For the purpose of executing the Bank Guarantee, the non-judicial stamp papers of appropriate value shall be purchased in the name of Bank who issues the 'Bank Guarantee'.
- 2. The Bank Guarantee shall be signed on all the pages by the Bank Authorities indicating their POA nos. and should invariably be witnessed.

# INDENMNITY BOND TO BE EXECUTED BY THE VENDOR FOR THE SPV SYTEM HANDED OVER BY SITRA FOR MAINTENANCE & PERFORMANCE AND WARRANTY CONTRACT (Entire Solar Photo Voltaic Plant)

(On non-judical stamp paper of appropriate value)

	HIS INDEMNITY BOND IS made this
(h as at	rm/Proprietory concern having its Registered Office at
Le Ar th ur	HEREAS SITRA has awarded to the Vendor a Contract for <b>Design, Supply, Installation and ommissioning of 100 KWp Solar Photo Voltaic Roof Top System</b> vide its Letter of Intent/Award tter/Contract No
an th	ND WHEREAS by virtue of Clause No. 1.4 of Chapter 4 of the Contract, the Vendor is required to execute in Indemnity Bond in favour of SITRA for the Solar Photo Voltaic System handed over to it by SITRA for the purpose of Maintenance and Performance Warranty Contract portion of the Contract. NOW, HEREFORE, this Indemnify Bond witnesses as follows:
1.	That in consideration of Solar Photo Voltaic System as mentioned in the Contract, Valued at Rs
2.	That the Vendor is obliged and shall remain absolutely responsible for the safe Maintenance and Performance Warranty Contract / protection and custody of the Solar Photo Voltaic Project against all risks whatsoever till completion of Maintenance and Performance Warranty Contract in accordance with the terms of the Contract and is taken over by SITRA. The Vendor undertakes to keep SITRA harmless against any loss or damage that may be caused to the Solar Photo Voltaic System.
3.	The Vendor undertakes that the Solar Photo Voltaic System shall be used exclusively for the Performance/execution of the Contract strictly in accordance with its terms and conditions of the Tender Documents part of the Solar Photo Voltaic System shall be utilised for any other work or purpose whatsoever. It is clearly understood by the Vendor that no-observance of the obligations under this Indemnify Bond by the Vendor shall inter-alia constitute a criminal breach of trust on the part of the Vendor for all intents and purposes including legal/penal consequences.
4.	That SITRA is and shall remain the exclusive owner of the Solar Photo Voltaic System free from all

encumbrances, charges or liens of any kind, whatsoever. The Solar Photo Voltaic System shall at all times be open to inspection and checking by Project Manager or other employees/agents authorised by him in this regard. Further, SITRA shall always be free at all times to take possession of the Solar Photo Voltaic System in whatever form the Solar Photo Voltaic System may be, if in its opinion, the Solar Photo Voltaic System are likely to be endangered, mis-utilised or converted to uses other than

those specified in the Contract, by any acts of omission of commission on the part of the Vendor or any other person or on account of any reason whatsoever and the Vendor binds itself and undertakes to comply with the directions of demand of SITRA to return the Solar Photo Voltaic System without any demur or reservation.

- 5. That this Indemnify Bond is irrevocable. If at any time any loss or damage occurs to the Solar Photo Voltaic System or the same or any part thereof is mis-utilised in any manner whatsoever, then the Vendor hereby agrees that the decision of the Project Manager of SITRA as to assessment of loss or damage to the Solar Photo Voltaic System shall be final and binding on the Vendor. The Vendor binds itself and undertakes to replace the lost and/or damaged Solar Photo Voltaic System at its own cost and / or shall pay the amount of loss to SITRA without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to SITRA against the Vendor under the Contract and under this Indemnify Bond.
- 6. NOW THE CONDITION of this Bond is that if the Vendor shall duly and punctually comply with the terms of and conditions of this Bond to the satisfaction of SITRA, THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

IN WITNESS WHEREOF, the Vendor has hereunto set its hand through its authorised representative under the common seal of the Company, the day, month and year first above mentioned.

#### **SCHEDULE**

WITNESS

For and on behalf of

Designation

Address

Particulars of the Equipment / Facilities handed over	Quantity	Value	Other details (if any)	Signature of Attorney in token of receipt

#### 

: .....

. ......

Indemnity Bonds are to be executed by the authorised persons and (i) In case of contracting Company under common seal of the Company of (ii) having the power of attorney issued under common seal of the company with authority to execute Indemnity Bonds, (iii) In case (ii) the original Power of Attorney if it is specifically for our contract or a Photostat copy of the Power of Attorney if it is a General Power of Attorney and such documents should be attached to Indemnity Bond.

The value shall be cumulative Contract value for Supply, Erection, commissioning and MPWC.

<u>LIST OF BANKS</u>
(For reference Purpose only, is not exhaustive)

	Nationalized Banks		Scheduled Banks
1	Allahabad Bank	1	Catholic Syrian Bank
2	Andhra Bank	2	City Union Bank
3	Bank of Baroda	3	Dhanalaxmi Bank
4	Bank of India	4	Federal Bank
5	Bank of Maharashtra	5	ING Vysya Bank
6	Canara Bank	6	Jammu and Kashmir Bank
7	Central Bank of India	7	Karnataka Bank
8	Corporation Bank	8	Karur Vysya Bank
9	Dena Bank	9	Lakshmi Vilas Bank
10	Indian Bank	10	Nainital Bank
11	Indian Overseas Bank	11	Ratnakar Bank
12	Oriental Bank of Commerce	12	South Indian Bank
13	Punjab National Bank	13	Tamilnad Mercantile Bank
14	Syndicate Bank		
15	Union Bank of India		Private Banks
16	United Bank of India	1	Axis Bank
17	Punjab & Sind Bank	2	Development Credit Bank (DCB)
18	UCO Bank	3	HDFC Bank
19	Vijaya Bank	4	ICICI Bank
20	IDBI Bank (77.79% Govt. Stake)	5	IndusInd Bank
21	State Bank of India	6	Kotak Mahindra Bank
22	Bharatiya Mahila Bank	7	Yes Bank
		8	IDFC Bank
		9	Bandhan Bank

#### **APPLICATION FOR E-PAYMENT**

To The Director The South India Textile Research Association 13/37, Avinashi Road Coimbatore – 641 014

Dear Sir,

Sub: Bid for Design, Supplying, Installation & Commissioning of 100KWp
Solar Photo Voltaic Roof Top System at SITRA, Coimbatore, Tamilnadu

We hereby furnish particulars for e-payment of the works bill / Advance etc.

S.no.	Particulars	
1	Name of the Vendor /Supplier	
2	Address of the Vendor / Supplier	
3	Name of the work for which payment is made	
4	Estimate No. / Agreement No. / Work order no.	
5	Name of the Bank in which Vendor / Supplier operating account Either with IOB or SBI or Any other Bank(If it is other than IOB or SBI, bank commission plus postage will be deducted)	
6	Address of the Bank	
7	Branch Code No	
8	Type of Account (Whether SB A/c or current A/c)	
9	Account No.	
10	PAN No.	
11	GST Registration No.	
12	IFSC Code No – Bank code	
13	Address as in GSTIN	

Yours sincerely

(Signature of the Vendor)

#### FORMAT FOR GUARANTEE CARD TO BE SUPPLIED WITH SPV SYSTEM

Tender No.: Date:

(To be submitted by bidders on the official letter head of the company/firm)

#### **Guarantee Card**

1.		Name & Address of the Manufacturer/ Supplier of the System					
2.	Nar	Name & Address of the Purchasing Agency					
3.	Dat	e of Supply of the System					
4.	Det	ails of PV Module(s) Supplied in the System					
	(a)	Name of the Manufacturer					
	(b)	Make					
	(c)	Model					
	(d)	Serial No.					
	(e)	Wattage of the PV Module(s) under STC					
	(f)	Guarantee Valid Up To					
5.	Det	ails of Electronics					
	(a)	Name of the part					
	(b)	Name of the Manufacturer					
	(c)	Make					
	(d)	Model					
	(e)	Batch/Serial No(s).					
	(f)	Month & Year of Manufacture					
	(g)	Guarantee Valid Up To					
6.	Det	ails of PCU/Inverter & Other BOS Items					
	(a)	Name of the Manufacturer					
	(b)	Make					
	(c)	Model					
	(d)	Serial No(s).					
	(e)	Month & Year of Manufacture					
	(f)	Guarantee Valid Up To					
7.		ignation & Address of the Person to be					
	Con	tacted for Claiming Guarantee Obligations					

(Signature of the Authorised Signatory with Name, Designation & Company Seal)

#### MATERIAL INSPECTION AND CLEARANCE CERTIFICATE (MICC)

1.	Name of the Work: Design, Supply, Installation and Commissioning of 100	KWp	Solar Photo Voltaic Roof Top System including 5 years
	MPWC at SITRA, Coimbatore.		
2.	Name of the Firm/Vendor:	3.	Work Order No. & Date:

4.	Shipment No.:	
----	---------------	--

No.	Item Description	Qty./ system	Invoice No. & date	Challan No. & date	Make	Unit price	Amount	Remarks
1	2	3	4	5	6	7	8	9
1.(a)	SPV Module							
(h)	Module/array Structure							
(c)	Junction Box							
2.(a)	PCU/Inverter							
(b)	Electronics							
3.(a)	Charge controlling unit							
(b)	ACDB,DCDB							
4.(a)	Cable & Wire							
(b)								
(c)	Switchgear & Protection, Earthing, Sign Board.							
5.(a)	Manual							
(b)	Others if any							

**5. Enclosed documents**: Packing List with model numbers, Invoice, Challan, Goods Consignment Note (Way Bill), etc.

**6. Receiver's comments**: Quantities shown in column 2 were received in apparent good condition except as noted. Acceptance of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents.

Signatur	e of authorized SITRA official/representative
Name	:
Designat	ion and date:

#### **COMPLETION CERTIFICATE**

<b>1. Name of the Work</b> : Design, Supply, Installation and Commissioning of 100 KWp Solar Photo Voltaic Roof Top System including 5 years MPWC at The South India Textile Research								
	Association, Coimbatore, Tamilnadu							
	2. Name of the Firm/Vendor:							
3. W	3. Work Order No. & Date:							
4. D	ate of Completion of Installat	ion:						
	ate of Commissioning of the S	=						
6. D	ate of Commencement of MP	WC:						
SL.	Item Description	Qty.	Make	Product Serial	Remarks if any			
No.	item 2 escription	۲۰,۰		No.	nemano n any			
1	2	3	4	5	6			
(a)	SPV Modules							
(b)	Module Mounting Structures							
(c)	Junction Box							
2.(a)	PCU/Inverter							
(b)	Electronics							
s.(a)	Charge Controlling Unit							
(b)	ACDB / DCDB							
l.(a)	Cable & Wire							
(b)	Monitoring System							
5.(a)	Cable & wire							
	Switchgear & Protection,							
(b)	Earthing, Sign Board.							
5.(a)	Manual							
(b)	Others if any							
7 5.		of Commis	tion Domonto al		f +h			
	nclosed documents: 3 copies stalled are hereby submitted to	•	•		•			
	ven in format above.	SITKA, DUL	II III IIaru anu Si	on copies wherein det	ans or equipment			
Ŭ	spected on:andjoin	tly by SITE	A officials and	representative of M/	c			
	irm) at the site and found okay.	try by 3111	A Officials and	representative or wij	3			
9. Si	gnature of Beneficiary: Quantit	ies shown	in column were	e received, installed a	nd tested at the			
lo	cation intimated by us.							
Si	gnature of SITRA representative:							
N	ame :							
D	esignation :							
	ate :							
	ndorsed and certified the above r	-						
Si	Signature of Authorised Signatory with Name, Designation, seal of Firm							

<u>"PRICE SCHEDULE/FINANCIAL BID"</u> for Design, Supply, Installation and Commissioning of 100 KWp Solar Photo Voltaic Roof Top System with Five years of Maintenance & Performance Warranty Contract (MPWC) at The South India Textile Research Association, Coimbatore, Tamilnadu

#### Tender No.: SITRA/ENGG/SOLAR POWER/001/2019 Dated 29/05/2019

To,
The Director
The South India Textile Research Association (SITRA),
13/37, Avinashi Road,
Coimbatore – 641014, Tamilnadu

#### **Price Schedule**

S. No.	ltem	Price in INR
1.0	System Cost for Design and Supply of 100 KWp SPV System	
1.1	Packing & Forwarding charges	
1.2	Insurance	
1.3	Transport / Freight charges	
1.4	Other charges, if any	
1.5	IGST/GST	
	System Cost (all inclusive) (A) (1.0+1.1+1.2+1.3+1.4+1.5)	
2.0	Installation & Commissioning charges (inclusive of handling, inspection, training charges)	
2.1	Other charges, if any	
2.2	Service Tax	
	Installation & Commissioning charges (all inclusive) (B) (2.0+2.1+2.2)	
3.0	Five years Comprehensive Maintenance & Performance Warranty Contract (MPWC)	
3.1	1 <sup>st</sup> year	
3.2	2 <sup>nd</sup> year	
3.3	3 <sup>rd</sup> year	
3.4	4 <sup>th</sup> year	
3.5	5 <sup>th</sup> year	
3.6	Service Tax	
	Comprehensive MPWC charges (all inclusive) ( C ) (3.1+3.2+3.3+3.4+3.5+3.6)	
	Total Price (P )=(A+B+C)	
	Total in words (Rupeesonly)	

Certified that rates quoted for SPV are as per specifications, terms & conditions mentioned in the bid document and our financial proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiration of the validity period of the Proposal, i.e., .............. (Date).

(Signature of Authorised Signatory with Name, Designation, Company Seal)

#### **Check list for submission of Bid**

S.no.	Document		Envelope
1	Appendix – 2: Information about the Bidding Form		Cover 'A'
2	Appendix – 3: Authority Letter for Signing Bid Document & Attending Bid Opening Meeting		Cover 'A'
3	Appendix – 4: Details of Orders Received and Executed in Past Years		Cover 'A'
4	Appendix – 5: No Deviation Certificate		Cover 'A'
5	Appendix – 6: Declaration regarding Banning and Liquidation, Court Receivership, etc		Cover 'A'
6	Appendix – 7: Format for Charted Accountant Certificate for Financial Capability of the Bidder		Cover 'A'
7	Appendix – 8: Format for Joint Venture Agreement		Cover 'A'
8	Appendix – 9: Format for Power of Attorney for Joint Venture	Techno-	Cover 'A'
9	Appendix – 10: Share Holding Certificate	commercial	Cover 'A'
10	Registration certificate of the Firm		Cover 'A'
11	Document for valid Channel Partner of MNRE		Cover 'A'
12	Certificate of mfg. of PV module, Inverter, Electronics, etc.		Cover 'A'
13	Test reports of components like PV module, Inverter, Electronics, etc.		Cover 'A'
14	Brochure/Catalog of PV module, Inverter, Electronics, etc.		Cover 'A'
15	Statement of experience of Bidder in On-Grid SPV System with 100 KWp and above capacity		Cover 'A'
16	Letter of authorized dealer/service provider		Cover 'A'
17	GSTIN certificate		Cover 'A'
18	Bill of Material of SPV System (without price)		Cover 'A'
19	Warranty card		
20	Appendix – 20: Format for submitting the Price Schedule		Cover 'B'
21	Bill of Material of SPV System (with price)	Financial	Cover 'B'
21	bill of iviaterial of SPV System (with price)		cover B
22	Tender Document		Cover 'C'
23	Appendix – 11: Bank Guarantee for "EMD"		Cover 'C'
24	Tender Fee		Cover 'C'
25	Appendix – 1: Covering Letter		Cover 'C'

All the above 3 covers are to be put in one master cover and the following information to be furnished on all 4 covers.

- Tender Ref. No with last date of submission
- Instrument(s) number with name
- Bidders complete postal address with contact person name and phone number

**Note**: If the bidder fails to furnish all the relevant documents / information as mentioned in the Tender Document, their bid will be rejected.