Rate Contract tender for Supply, Installation, Commissioning and 5 years Comprehensive Maintenance of Grid Connected Rooftop Solar Power plants for a cumulative capacity of 10MWp in various Government buildings, Tamil Nadu under CAPEX model.

Tender reference: 1079/TEDA/GB-CAPEX/2022 dated 14.04.2022



#### Issued by:

Tamil Nadu Energy Development Agency, E.V.K. SampathMaaligai, 5th Floor, No. 68, College Road, Chennai 600 006.

Phone: 044 - 28242800

Email: tender@teda.in, dgm2@teda.in

Website: www.teda.in

# CONTENT OF THE BID DOCUMENT

SECTION -A	TENDER ELIGIBILITY & INSTRUCTIONS
SECTION -B	BID SUBMISSION & EVALUATION
SECTION-C	AWARD & EXECUTION
SECTION-D	TECHNICAL SPECIFICATIONS
SECTION-E	FORMATS & ANNEXURES

SI.	Description	
No		No.
	SECTION-A	
	TENDER ELIGIBILITY & INSTRUCTIONS	
1.	Introduction	8
2.	Tender Data Sheet	8
3.	Tender Cost and EMD	9
	3.1 Cost of Bidding	9
	3.2 Tender Document Fee	10
	3.3 Earnest Money Deposit (EMD)	10
4.	Tender Eligibility Criteria	12
5.	Instructions to the Bidder	14
	5.1 General Instructions	14
	5.2 Language of the Bids	15
	5.3 Bid Currency	16
	5.4 Clarifications and Amendments	16
	5.5 Contacting Tender Inviting Authority	16

	5.6 Force Majeure	17
	5.7 Arbitration	17
	5.8 Bar of Jurisdiction	17
	5.9 Blacklisting	18
	SECTION -B	
	BID SUBMISSION AND EVALUATION	10
6.	BIDS PREPARATION  (1) attent of Authorization	18
	6.1 Letter of Authorization	19
	6.2 Test Certificates/Reports	19
7.	BID SUBMISSION	19
	7.1 Techno Commercial Bid (Envelope-A)	19
	7.1.1 Details to be furnished in the Techno Commercial Bid	20
	7.1.2 Signing the Techno Commercial Bid	20
	7.1.3 Sealing the Techno Commercial Bid	20
	7.2 Price Bid (Envelope-B)	21
	7.2.1 Details to be furnished	21
	7.2.2 Signing the Price Bid	21
	7.2.3 Sealing the Price Bid	22
	7.3 Outer Cover	22
	7.4 Mode of submission of Bids	22
	7.5 Modification and withdrawal of Bid	23
8.	BIDOPENING	23
	8.1 Techno Commercial Bid Opening	23
	8.2 Bid Validity	23
	8.3 Initial Scrutiny	24
	8.4 Clarifications by TEDA	24
9.	BID EVALUATION	24
	9.1 Suppression of facts and misleading information	25
	9.2 Techno Commercial Bid Evaluation	25
	9.3 Price Bid Evaluation	26
	9.4 Award of Contract	27
	9.5 TEDA reserves the right to	
	SECTION-C	
10	AWARD & EXECUTION	07
10.	AWARD OF WORK	27
	10.1 Acceptance of the Tender	27
	10.2 Letter of Intimation(LoI)	28
	10.3 Letter of Acceptance (LoA)	28
	10.4 Payment of Security Deposit (SD)	28

	10.5 Execution of Agreement	28
	10.6 Test Certificates/Reports	29
	10.7 Release of Firm Work Order	29
	10.8 Installation & Completion Schedule	29
	10.9 Release of SD	29
	10.10 Termination of Contract	30
	10.10.1 Termination for default	30
	10.10.2 Termination for insolvency	30
	10.10.3 Termination for convenience	31
11.	Execution of Work	31
	11.1 Scope of work	31
	11.2 Insurance	32
	11.3 Handing over	33
	11.4 Comprehensive Maintenance for 5 years	33
	11.5 Product take back and recycling	35
	11.6 Warranty	35
	11.7 Inspection	36
12.	Liquidated Damages	36
13.	Workmen's Compensation Insurance	36
14.	Payment Terms	37
15.	Generation Guarantee	38
16	Tender validity	38
	SECTION -D TECHNICAL SPECIFICATIONS	
17.	Technical Specifications for Grid Connected SPV Power Plant	38-51
	SECTION- E	
F 4	FORMATS & ANNEXURES	F.0
F-1	Techno commercial Bid Format (Envelope A)	52
F-2	Bidder's undertaking covering letter	54
F-3	Bidder's undertaking for minimum quantity offered	56
F-4	Model Form of Contract	57
F-5	Draft Undertaking in Lieu of EMD	69
F-6	Letter certifying the number of pages in bid documents	71
F-7	Price Bid (Envelope-B)	72
A-1	EMD Exemption	74
A - 2	Tentative locations	75

	ACRONYMS			
SI.No.	Parameter	Details		
1.	AC	Alternating Current		
2.	BIS	Bureau of Indian Standards		
3.	BoS	Balance of System		
4.	CMC	Comprehensive Maintenance Charges		
5.	DC	Direct Current		
6.	IEC	International Electro Technical Commission		
7.	MPPT	Maximum Power Point Tracking		
8.	NABL	National Accreditation Board for testing and calibration Laboratories		
9.	PCU	Power Conditioning Unit		
10.	PWM	Pulse Width Modulation		
11.	RFID	Radio Frequency Identification		
12.	STC	Standard Testing Conditions		
13.	THD	Total Harmonic Distortion		

SHORT TITLES	USED IN THE	TENDER	DOCUMENT

1.	Bidder	Bidder means the party who makes a formal offer in pursuance of the Tender floated	
2.	Successful Bidder	Successful Bidder means the bidder who becomes successful through the Tender process.	
3.	Day	A day means a calendar day	
4.	Testing Agency	Testing Agency notified by TEDA for the purpose of sample testing.	
5.	Cost	Cost means the total cost to be incurred towards the supply, installation, commissioning and 5 years comprehensive Maintenance of grid Connected rooftop SPV Systems.	
6.	Purchaser	Purchaser means the Government of Tamil Nadu for whom the procurement is made through this Tender.	
7.	TEDA	Tamil Nadu Energy Development Agency - the Procurement agency on behalf of Government of Tamil Nadu	
8.	Commissioning	Commissioning means the grid Connected plants would have to be energized through SPV system and the functioning has to be tested.	
9.	End user	End user means the beneficiary to whom Grid Connected Rooftop solar system is provided.	

# Applicability of Tamil Nadu Transparency in Tenders Act 1998

This Tender process will be governed by The Tamil Nadu Transparency in Tenders Act 1998 and The Tamil Nadu Transparency in Tenders Rules, 2000 (http://www.tn.gov.in/gorders/fin446-e.htm) as amended from time to time.

# CHECKLIST FOR ENCLOSURE

(Bidder shall fill up YES or NO without fail)

SI.No.	Bid Enclosure		Page No.
1.	Whether the Tender is submitted in Two covers (Techno Commercial Bid and Price Bid)?		
2.	Whether Two covers are put into an outer cover?		
3.	Whether Technical Bid (Envelope- A) contains the following		
3.1	Earnest Money Deposit (EMD) amount as specified in the Tender or undertaking in lieu of EMD as per Format F5 with NSIC/SSI/MSME.		
3.2	Bidder's undertaking covering letter as per Format F2 in the Letter Head signed by the authority & stamped.		
3.3	Signed and stamped Letter of Authorization (or) Power of Attorney for signing the Tender document.		
3.4	All pages of the blank Tender document in full signed by the authority & stamped.		
3.5	Filled up Technical Bid signed by the authority & stamped		
3.6	Supporting documents to meet the Eligibility Criteria All documents shall be in English only. Documents in any other language shall be accompanied by an accurate translation in English, duly notarized and signed by the authority and stamped in all pages		
	a) Bidder's Certificate of Incorporation / Registration - Enclosed		
	b) Bidder's undertaking for supplying entire quantity called for in the Tender as per Format F3 - Enclosed		
	c) Necessary undertaking by the bidder for using only SPV modules & Cells manufactured in India		
	d) Balance Sheet and Profit & Loss accounts for all three audited years from 2018-19 to 2020-21		

SI.No.	Bid Enclosure	YES	Page
		or	No.
		NO	
	e) Copy of Work Orders along with proof for satisfactory performance of that work- Enclosed		
	f) Bidder's undertaking letter for not currently blacklisted -		
	Enclosed.		
4.	F.1 Techno Commercial Bid Format (Envelope-A)		
5.	Whether Price Bid (Envelope-B) contains the following		
	a) Filled Price Bid with signature and stamp in all pages.		
	b) Whether corrections or overwriting if any is attested?		
6.	Whether Bid documents are page numbered & bounded		

#### **IMPORTANT NOTE:**

Bidder must ensure that they have submitted all the required documents indicated in the Tender document without fail. Bids received without supporting documents for the various requirements mentioned in the tender document are liable to be rejected. The data sheet for the critical components shall be submitted by the Bidder for scrutiny.

Bid documents shall be page numbered & bound. Any loose/ unbound documents or documents which are not page numbered are liable for rejection.

# SECTION -A TENDER ELIGIBILITY AND INSTRUCTIONS

#### INTRODUCTION

TEDA on behalf of the various Government Departments in Tamil Nadu calls for Competitive Bidding tender for Supply, Installation, Commissioning and 5 years Comprehensive Maintenance of Grid Connected Rooftop Solar Power plants for a cumulative capacity of 10MW based on the procedures stipulated in the Tamil Nadu Transparency in Tenders Act 1998 and Tenders Rules 2000.

The generated solar power from the power plant will be consumed in the premises and the excess power if any, can be fed into the grid as per the grid Connectivity norms specified in existing TNERC orders and as amended from time to time.

The Successful Bidder shall work closely with TEDA and Government Departments in Tamil Nadu involved in implementing the above work and ensure the success of the Programme, by completing the installations from the date of granting permission by the concerned officials for carrying out the works. The project pertains to a clean/ RE project (Solar Energy) intended to reduce carbon emissions.

2.	2. TENDER DATA SHEET			
1	Tender inviting Authority, Designation and Address	The General Manager Tamil Nadu Energy Development Agency 5th Floor, EVK Sampath Maaligai, No.68, College Road, Chennai-600006 (INDIA) Phone: +91-44-28242800 Fax: +91-44-28222971 Email: tender@teda.in , dgm2@teda.in Website: www.teda.in		
2	a) Name of the Work	Rate Contract tender for Supply, Installation, Commissioning and 5 years Comprehensive Maintenance of Grid Connected Rooftop Solar Power plants for a cumulative capacity of 10MW in various Government buildings, Tamil Nadu.		
	b) Tender Reference	Tender reference: 1079/TEDA/GB-CAPEX/2022 dt: 14.04.2022		

	c) Place of execution	Various Government Department Buildings
3	a) Tender documents available place and date for obtaining tender	On all working days between 11.00 A.M. and 5.00 P.M. upto 24.05.2022 at TEDA office. Alternatively, Tender documents can be downloaded at free of cost from www.teda.in and www.tenders.tn.gov.in
	b) Cost of Tender Document	Rs.1000/-(Rupees One Thousand only) per Tender Document for direct purchase from TEDA. The Tender document may also be downloaded at free of cost.
4	Earnest Money Deposit (EMD).	Rs.10,00,000/- [EMD] has to be paid in Indian Rupees by towards way of Demand Draft or Banker's Cheque only, from any of the Nationalized/ Scheduled banks, drawn in favour of "Tamil Nadu Energy Development Agency" and payable at Chennai only. EMD submitted in any other forms will be SUMMARILY REJECTED.
5	Tender Processing Fee(TPF)	Rs.10,000/-plus 18%. TPF has to be paid in Indian Rupees by towards way of Demand Draft or Banker's Cheque only, from any of the Nationalized/ Scheduled banks, drawn in favour of "Tamil Nadu Energy Development Agency" and payable at Chennai only. TPF submitted in any other forms will be SUMMARILY REJECTED.
6	Pre-Bid meeting date time and place	On 05.05.2022 @ 3.00 P.M. at TEDA office.
7	Due Date, Time and Place of submission of Tender	On 25.05.2022 up to 03:00 P.M. at TEDA office.
8	Date, Time and Place of Tender opening	On 25.05.2022, 03:15 P.M. at TEDA office.
9	Date, Time and Place of opening of Price Bids	Will be intimated only to the bidders qualified in Techno commercial bid.

<sup>\*</sup>If any one of the above dates happens to be a holiday, next working day will be the due date.

# 3. TENDER COST AND EMD

#### 3.1 Cost of Bidding

The Bidders shall bear all costs associated with the preparation and submission of Bids. TEDA will in no way be responsible or liable for these charges/costs incurred regardless of the conduct or outcome of the bidding process.

#### 3.2 Tender Document Fee

- a) The Tender documents may be purchased from the office of TEDA on payment of fee for the same in Indian Rupees as mentioned in the Tender Data sheet. The Tender document is not transferable to any other Bidder.
- b) The Tender document cost may be paid by way of cash (or) Demand Draft /Banker's Cheque in favour of "Tamil Nadu Energy Development Agency", payable at Chennai for direct purchase from TEDA.
- c) Alternatively, the Tender document can be downloaded affree of cost from the website mentioned in the Tender data sheet.

### 3.3 Earnest Money Deposit (EMD)

- a) An EMD amount as specified in the Tender Data sheet shall be paid in Indian Rupees in the form of Demand Draft/ Banker's Cheque only, from any of the Nationalized/ Scheduled banks, drawn in favour of "Tamil Nadu Energy Development Agency" payable at Chennai.EMD submitted in any other forms will be SUMMARILY REJECTED.
- b) The EMD shall be kept in the Techno Commercial Bid Cover.
- c) The EMD amount of the bidders not qualified in the Techno commercial bid will be refunded immediately, after rejection of their techno-commercial bid. The EMD amount of the bidders qualified in the techno commercial bid but not successful, will be refunded after finalization and signing of agreement with the successful bidder. The EMD amount held by TEDA, till it is refunded to the Bidders will not earn any interest thereof.
- d) The EMD amount paid by the Successful Bidder will be adjusted towards Security Deposit payable by them. If the successful Bidder submits Security Deposit for the stipulated value in full in the form of DD/ Banker's Cheque, the EMD will be refunded.
- e) The EMD amount will be forfeited by TEDA, if the Bidder withdraws the bid during the period of its validity specified in the tender or if the successful bidder fails to sign the contract or the successful bidder fails to remit the Security Deposit within the due date.

- f) The bids received without the specified EMD amount will be **SUMMARILY REJECTED.**
- g) For the categories of industries exempted from payment of Earnest Money Deposit, see Annexure-1.
- h) Industries exempted from payment of EMD shall enclose duly attested Photostat copy of their Registration Certificate showing the materials viz.SPV Panels, PV System Electronics(Inverter only) they are permitted to manufacture/to do services as a system integrator of solar plants and the period of validity of the certificate as proof of eligibility for exemption from payment of EMD.
  - i) Those Bidders who are exempted from payment of EMD shall furnish in lieu of EMD an under taking in a non-judicial stamp paper of value not less than Rs. 80.00 (Rupees Eighty only) in the prescribed format (as per Format-5), to the effect to pay penalty an amount equivalent to EMD in the event of non-fulfillment or non-observance of any of the conditions stipulated in the contract consequent to such breach of contract.
  - j) Undertaking and proof of exemption of EMD shall be kept in the Techno commercial bid cover as specified Section –E (Annexure-1). TENDERS RECEIVED WITHOUT PROOF FOR EXEMPTION OF EMD AND UNDERTAKING WILL NOT BE READOUT AND WILL BE SUMMARILY REJECTED.

#### 3.4 Tender Processing Fee

- a) Tender Processing Fee (TPF) as specified in the Tender Data sheet shall be paid in Indian Rupees in the form of Demand Draft/ Banker's Cheque only, from any of the Nationalized/ Scheduled / Foreign banks, drawn in favour of "Tamil Nadu Energy Development Agency" payable at Chennai. TPF submitted in any other forms will be SUMMARILY REJECTED.
- b) The TPF shall be kept in the Techno Commercial Bid Cover.
- c) The TPF amount of the bidders will not be refunded.
- d) The bids received without the specified Tender Processing Fee will be **SUMMARILY REJECTED**.

# 4 TENDER ELIGIBILITY CRITERIA

The details of eligibility requirements are provided in the table below. It is the bidder can be sole/single bidder (legal Entity) that must satisfy the eligibility and qualification criteria.

# 1) Eligibility Category for General Category

S.No	Minimum Eligibility Criteria	Proof to be submitted for fulfilling eligibility criteria
1	General	
1a	The Bidder should have any of the following legal status:  a. Body incorporated in India under the Companies Act, 2013 including any amendment thereto;  OR  b. Body incorporated in India under the Limited Liability Partnership (LLP)  Act, 2008 including any amendment thereto;  OR  c. Firm registered under Partnership Act, 1932 in India;  OR  d. Sole Proprietor firm	Certificate of Incorporation or Registration shall be submitted
1b	The Bidder must have the required GST Registration.	Copy of GST registration certificate with legible GSTIN shall be submitted
1c	The Bidder must have valid PAN Number.	Copy of Pan Card shall be submitted
1d	Bidder shall submit the No conflicts of interest in Rate Contract tender	Necessary undertaking by the bidder in their Letter Head to this effect shall be submitted

1e	Bidder shall not be currently blacklisted by any of the State or Central Government organizations or undertakings of the State or Central Government or Union Territories of India as on date of submission of tender.	Necessary undertaking by the bidder in their Letter Head to this effect shall be submitted
2	Financial	
2a	The financial statements for the last three (3) years shall be submitted and must demonstrate the current soundness of the Bidder's financial position and indicate its prospective long-term profitability.  As a minimum requirement, a Bidder's net worth calculated as the difference between total assets and total liabilities should be positive for each of the last three (3) Financial Years (FY18-19, FY19-20 and FY20-21, ).	Auditor Certificate shall be furnished
2b	The Minimum average Annual Turn Over (MAAT) in the immediate preceding three completed financial years should not be less than ₹ 50 lakhs.	a) Balance Sheet b) Profit & Loss accounts of all the three audited years from 2018-19 to 2020-21 shall be submitted towards meeting annual turnover criteria
3	Technical	
3a	Bidder shall have experience of execution of design, supply, installation and maintenance of Grid-connected (10 kW and above) SPV systems, having a cumulative capacity of 500kW spread across India during the last five years (i.e., 2016-17 to 2020-21). The bidder works shall have been executed under SNA / Govt. Organization /PSU only	Copies of the Commissioning Certificates and corresponding work orders/Contracts/Agreements from the SNA/Govt. organization/PSUs as proof of credential of the bidder in this regard shall be submitted.

3b	The Bidder shall use a Solar PV cell [domestically manufactured only if the same has manufactured in India, using undiffused silicon wafer (generally called black wafer) classifiable under customs Tariff Head 3818 and all steps /processes required for manufacturing solar PV cell from the un diffused silicon wafer have been carried out in India] and SPV modules manufactured in India and should be in MNRE ALLM List.	Necessary undertaking by the bidder in their Letter Head to this effect shall be submitted.
3c	The Bidder shall submit the test certificates /Reports viz.,module, Inverter fuses, surge arrestor, cables, Junction boxes, Earthing & Lightining arrester along with the Security Deposit. The components shall be allowed only if those components have been certified by any NABL/IECQ accredited laboratories for compliance to the stipulated technical specifications as per Section - D of this tender	Necessary undertaking by the bidder in their Letter Head to this effect shall be submitted.

#### 5 INSTRUCTIONS TO THE BIDDER

#### 5.1 General Instructions

- a) It will be imperative for each Bidder to familiarize himself with the prevailing legal situations for the execution of contract. TEDA shall not entertain any request for clarification from the Bidder regarding such legal aspects of submission of the Bids.
- b) It will be the responsibility of the Bidder that all factors have been investigated and considered while submitting the Bids and no claim whatsoever including those of financial adjustments to the contract awarded under this tender will be entertained by TEDA. Neither any time schedule nor financial adjustments arising thereof shall be permitted on account of failure by the Bidder to appraise themselves.

- c) The Bidder shall be deemed to have satisfied himself fully before Bidding as to the correctness and sufficiency of its Bids for the contract and price quoted in the Bid to cover all obligations under this Tender.
- d) It must be clearly understood that the Terms and Conditions and specifications are intended to be strictly enforced. No escalation of cost in the Tender by the Bidder will be permitted throughout the period of Agreement or throughout the period of completion of contract whichever is later on account of any reasons whatsoever.
- e) The Bidder shall make all arrangements as part of the contract for Supply, Installation, Commissioning and 5 years Comprehensive Maintenance of Grid Connected Rooftop Solar Power plants in various Government buildings as per tender.
- f) The Bidder shall be fully and completely responsible to TEDA and various Government Departments for all the deliveries and deliverables. The bidder shall be responsible for the proper functioning of the finally erected systems.
- g) All Statutory obligations/liabilities like Salary, ESI, P.F., as per Labor Laws for the persons employed for this contract will be the responsibility of the bidder. TEDA will not make any direct payment thereof and will not be responsible for any lapses by the bidder.
- h) The bidder has to have adequate field service setup within 200km to provide good service after installation including necessary repair and maintenance. Service Centre address with contact number & contact person to be given by the installer along with the invoice otherwise the invoice is invalid.
- i) The solar Power plant drawing shall be prepared and submitted for approval of CEIG. Wherever approvals of CEIG are required and the necessary charges for the same will have to be borne by the bidder.

#### 5.2 Language of the Bids

The bid prepared by the Bidder as well as all correspondence and documents relating to the bid shall be in **English only**. The supporting documents and printed literature furnished by the Bidder in any other language shall necessarily be accompanied by an accurate translation in