TENDER FOR DESIGN, ENGINEERING, SUPPLY, INSTALLATOIN & COMMISSIONING OF THE 200kWp GRID-TIED SOLAR PV SYSTEM AT JAYADEV MEMORIAL RASHTROTTNA HOSPITAL AND RESEARCH CENTRE, RR NAGARA, BANGALORE.

# NOTICE INVITING TENDER (NIT)

1.	Client	Rashtrotthana Trust, Ground Floor, 93/1, Keshava Shilpa, Kempegowda Nagar, Bengaluru-560004.
2.	Project	Jayadev Memorial Rashtrotthana Hospital & Research Centre.
3.	Location	RR Nagar, Bengaluru.
4.	Description of work	Design, Engineering, Supply, Installation & Commissioning of the <b>200kWp</b> Grid-Tied Solar PV system.
5.	Schedule of work	3 Months from the date of WO issued.
6.	Date on Tender Opening	28 February 2024
7.	Last date & time of hard copy submission	6th March 2024. Sealed tenders are to be submitted in two parts i.e. Part-I containing Technical Competence and Part-II containing only Financial Quote in a separate sealed envelope and addressed to Rashtrotthana Trust, Ground Floor, 93/1, Keshava Shilpa, Kempegowda Nagar, Bengaluru-560004.
8.	Client list	The bidders are required to submit a minimum of 5 (five) customers' details to whom similar equipment has been supplied, installed, commissioned and maintained with satisfactory performance report/certificate from such customers,
9.	Contact Details for Communication	-

#### **Eligibility Criterion:**

#### **Eligibility to bidders:**

- 1. Organization should be in operation for at least 15 years. The details of the service centers to be furnished.
- 2. Company registration certificates to be submitted to establish the registration dates.
- 3. Memorandum of Association of the company to be submitted. The nature of business of the company to be indicated in the same
- 4. Staff strength of the organization should be more than 500.
- 5. The bidder should have more than 5 company owned branches/service centers operational for at least 3 years in the Karnataka region.
- 6. The company should be able to provide excellent service. Should have a robust complaint addressing system with a dedicated toll free number to lodge complaints. The complaints to be addressed within 48 hrs of lodging.
- 7. The bidder should have had revenue of more than 25 crores per year for the last three financial years.
- 8. The specifications of all the components to be provided as part of this tender should adhere to the technical specifications mentioned in the tender.
- 9. Suppliers should have experience of implementing grid/hybrid solar power systems in Karnataka. Relevant documentation of at least 10 such projects successfully completed in the last three years to be submitted.
- 10. Audited IT returns for three previous financial years
- 12. GST clearance certificate up to 31st March of the previous financial year.
- 13. Pan card for the Organization.
- 14. Self-Declaration Certificate to declare that the organization is not blacklisted.

# A. Bill of Material: Specifications & Brand Options

Sr. No.	Item	Specification	
1	Solar PV Modules	Minimum 535 Wp, 144 cell;Mono-crystalline.	
2	Solar Inverter String Inverters 3-Phase, 415V, 50Hz		
3	Solar Panel Mounting structure	Hot Dip Galvanized Iron Structure with minimum 60 microns coating for RCC roof /Anodized aluminium structure for metal sheet roof	
4	ACDB	IP65 enclosure with MCB/MCCB protection, SPD's and Misc items	
5	DCDB/AJB	IP65 enclosure with DC Fuses, DC SPD's,DC MCB and Misc items	
6	DC Cable	Min. 4 Sq. mm or higher as per power handling requirement UV protected (flexible,	
7	AC Cable	Specify size as per your Design after considering the current carrying capacity and transmission losses	
8	Earthing pits, Strips or Cable  Chemical Earthing: GI Strips, Copper Bonded electrode, Back fill compour Pits,& Chamber Covers. All conforming to IS 3043 (1987)		
9	Net Meter	3 Phase-As per specifications of DISCOM	
10	Miscellaneous Items	Cable Trays, Connectors, Lugs, Conduits, Nut Bolts, etc.	
11	Lightning Arrester	As per the site requirement	
12	12 Walkway FRP Walk-way , as per requirement.		

#### **B.** Warranty terms:

- 1. The vendor shall provide **5 Years of Warranty on Inverter, Electrical BOS and** Structure .
- 2. 10 years product warranty, 25 years of performance warranty on solar modules .

#### **Techno - Commercial Offer**

**Grid Connected rooftop system with Net Metering** 

- A. Design, Engineering, Supply, Installation & Commissioning and satisfactory Handover of the 200kWp Grid-Tied Solar PV system
  - 1. Total Solar System Material Cost:

	Particular
Installation Location	
System Size	
Solar System (rate per kWp)	Rs.
Solar System Cost	Rs.
GST Applicable*	<u>%</u>
GST Amount	Rs.
Total Solar System Cost (A)	Rs.

### 2. Installation & Commissioning:

Value	Particular
System Size	200 kWp
Installation & Commissioning (rate per kWp)	Rs.
Installation & Commissioning Cost	Rs.
GST Applicable*	<u>_</u> %
GST Amount	Rs.
Total Solar System Installation & Commissioning Cost (B)	Rs.

<sup>\*</sup>Confirm the Applicable GST Rate separately for (a) Supply of "Solar Power Generating System" and (b) Installation & Commissioning

### 3. AMC COST:

Value	Particular
System Size	200 kWp
AMC cost from second year onwards (rate per kWp per year)	Rs.
Total AMC cost per year	Rs.

GST Applicable*	<u>_</u> %
GST Amount	Rs.
Total Solar System AMC cost (C)	Rs.

## 4. Total Project Cost:

Value	Particular
System Size	200 kWp
Total Project Cost (A+B+C)	Rs

5.	Payment Schedule: Following shall be the Payment Schedule:			
A.	First Instalment:			
	To be released with PO			
	30% of total project cost: Rs.			
В.	Second Instalment:			
	Against Delivery of Solar Panels on site			
	30% of Project Cost: Rs.			
C.	Third Instalment:			
	Against Delivery of Inverters & BoS on site			
	30%of Project Cost: Rs.			
D.	Fourth Instalment			
	Against commissioning of Inverter/s and installation of net meter			
	10% of Project Cost: Rs.			

#### 6. Standard Warranties:

Sr. No.	Equipment	Warranty Period	Description / Warranty Provider name
1	Solar Panels	Years	
2	Solar Inverters	Years	
3	Mounting Structure	Years	
4	Cables & Electrical Balance of System	Years	

Note: Provide the terms of Standard equipment warranty as applicable from the manufacturer.

## 7. Equipment Specification:

Sr No.	Equipment	Make/s	Specification	Quantity
1	Solar PV Module			
2	Solar Inverter			
3	Mounting Structure			
4	DC Cables			
5	AC Cables			
6	LT panel			
7	ACDB			
8	AJB/DCDB			
9	Earthing			
10	Lightning arrestor			

#### 8. Terms & Conditions:

- > Design, Engineering, Supply, Installation & Commissioning
- > Technology Selection Solar Modules, Inverters, Cables, Layout optimization
- > Supply & Installation of Solar Power Modules
- > Supply & Installation of mounting structures for solar panels
- > Supply, Installation and commissioning of Solar Inverters
- ➤ Installation of DC/ AC cabling for the entire plant
- > Combiner Boxes, Cabling and Termination.
- ➤ Lightning Arrester and Earthing system Installation
- > Plant Trials prior to Commissioning: Synchronization of solar power plant with grid and evacuation of solar power into local grid.
- ➤ Net meter Device Cost, Net meter application, inspection and approval fee.
- > One year free service of solar plant

#### A. Tenderer's scope of work:

- > Access to Installation area
- > Provide water and electricity free of charge during the installation & mounting structure assembly.
- Access to Temporary storage space on site, for project material
- ➤ LAN connection for the monitoring system with router/Wifi network.
- Ownership documents of land/property to be submitted

#### B. Duties & Taxes:

- ➤ All taxes & duties should be included in the quoted system cost.
- > No additional taxes will be applicable to Tenderer .

#### C. Generic terms and conditions:

- > All material brands will be as per the BOM mentioned in quotation. Any deviation will be allowed, only after the written approval from Tenderer.
- > Vendor and Tenderer to sign a service agreement stating, Performance guarantee and related terms and conditions.

#### 9. RIGHT TO WITHDRAW THE TENDER AND TO REJECT ANY BID.

- > This tender may be withdrawn or cancelled by Rashtrotthana Trust at any time without assigning any reasons thereof. Rashtrotthana Trust further reserves the right, at its complete discretion, to reject any or all of the Bids without assigning any reasons whatsoever and without incurring any liability on any account.
- Rashtrotthana Trust reserves its right to vary, modify, revise, amend or change any of the terms and conditions of the Bid before submission. The decision regarding acceptance or rejection of bid by Rashtrotthana Trust will be final.
- The acceptance of a tender will rest with the Competent Authority, who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all the tenders received, without assigning any reasons. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.

#### 10. WORK PERFORMED AT CONTRACTORS RISK.

All works shall be done by the contractor with utmost care and if any loss or damage shall result from fire or from others cause, the contractor shall promptly make good such loss or damage e/or replace and make the employer free from all such expenses. The work shall be carried on to completion without interferences with the operations of existing machinery or equipment, if any. In case, performance of Solar PV System found unsatisfactory during any time, Rahtrotthana Trust has rights to terminate the contract without any prior information.