

No.A2/353(35)/2018/MPTC

22/07/2019

MODEL POLYTECHNIC COLLEGE

(Managed by IHRD)

Mattakkara P. O, Kottayam (Dt.)- 686 564

Phone No.0481 2542022

E-TENDER NOTICE

Competitive e-tenders in one cover system with Earnest Money Deposit (EMD) and Price Bid in accordance with the ANERT approved technical specifications are invited from **ANERT Empanelled Agencies** (listed for 20KWp On-Grid) for the Design, Supply, Erection, Installation & Commissioning including comprehensive warranty, operation & maintenance for 25 years for solar module & Mounting structure and five years for all other Equipments of 20KWp On-Grid SPV Power Plant at Model Polytechnic College, Mattakkara, Kottayam-686564. The e-tender documents can be downloaded from the e-tendering website of Govt. of Kerala from 05/08/2019 to 26/08/2019 till 3pm. Tender form will not be available in any other form. *Details of work to be carried out with equipment specification will provide along with this tender. Service providers are requested to visit the campus to study the project before submitting the tender.*

Website . <http://www.etenders.kerala.gov.in>

Tender Ref. No. - **01/P35/2019**

Tender ID . - **2019_DTE_290654_1**

Mattakkara

22/07/2019

Sd/-

Principal

TENDER ABSTRACT

Ref. No. No.A2/353(35)/2018/MPTC

Superscription **Design, Supply, Erection, Installation & Commissioning including warranty, operation and maintenance for 25 years for solar module & mounting structure and minimum five years for other equipments of 20 KW On-Grid SPV Power Plant at Model Polytechnic College, Mattakkara, Kottayam-686564**

Download of Tender Form 05/08/2019 , 3PM Online at the website <http://www.etenders.kerala.gov.in>

Last date of submission of Tender 26/08/2019, 3 PM Online at the website <http://www.etenders.kerala.gov.in>

Date and Time of opening the Tender 29/08/2019 , 11.30AM

Cost of Tender form Rs. 2500/- + 18% GST (Rs.2950/-)
(Payment by online, as per e-tender schedule)

EMD Rs. 44,250/-
(Payment by online, as per e-tender schedule)

Warranty period Minimum Twenty Five years for solar module & Mounting structure and five years for all other Equipments should be offered.

Site details Roof top of **Library Block Building of Model Polytechnic College, Mattakkara, Kottayam, 686564**

Name and Address of the officer from whom Tender forms are to be obtained Website <http://www.etenders.kerala.gov.in>

Place of opening of tender Office of the Principal
Model Polytechnic College
Mattakkara
Kottayam - 686564

Mattakkara

22/07/2019

Sd/-

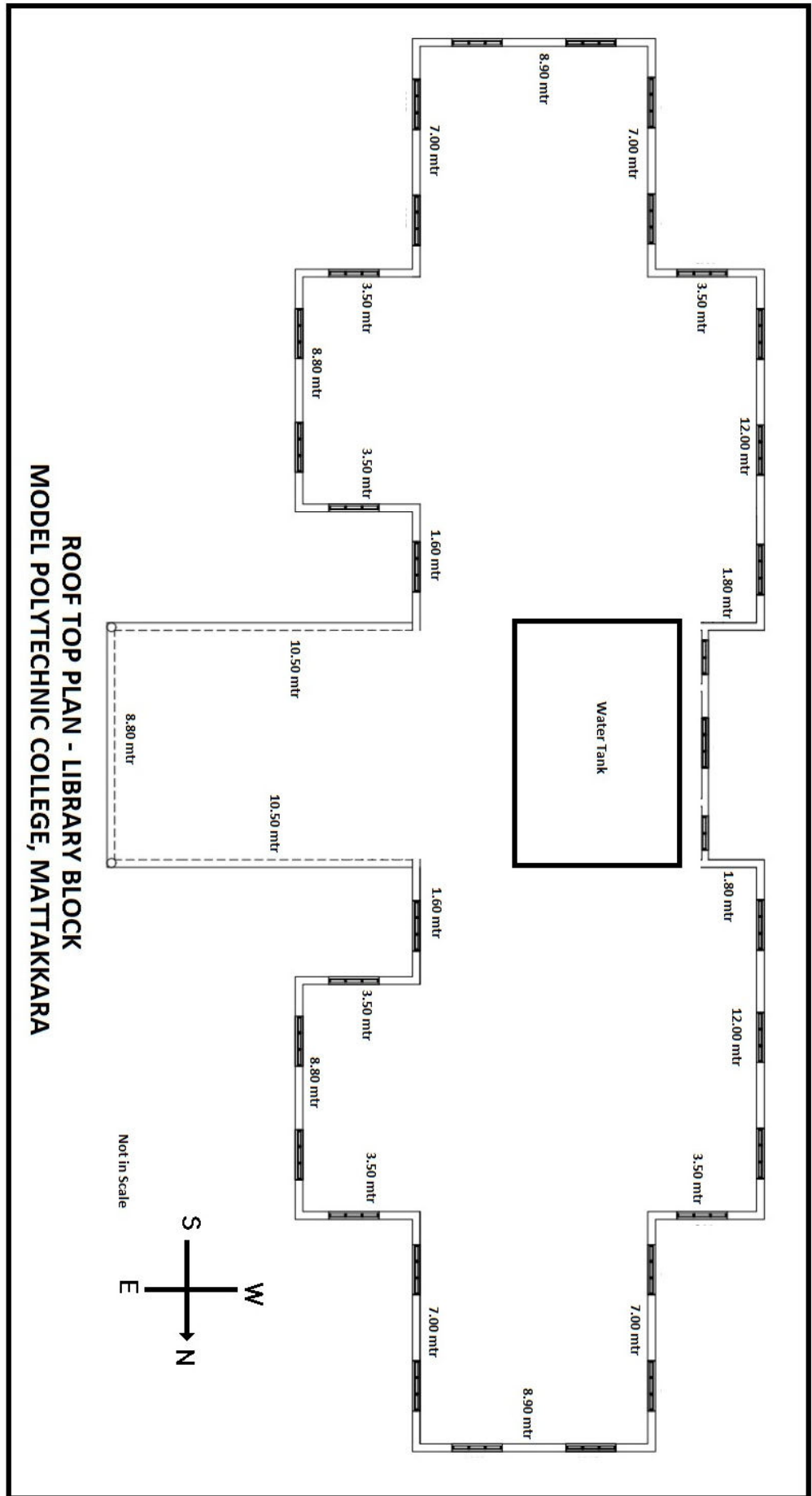
Principal

The project cost must include the following items

| Sl No | Proposal Details | KWp | Remarks |
|-------|---|-----|-------------------|
| 1. | Installation cost of power plant | 20 | Approved by ANERT |
| 2. | Cost of Solar Generation Meter, Net Meter, KSEB & Electrical Inspectorate Registration Fee, Cabling | 20 | Approved by ANERT |
| 3. | Cost of Motor and plumbing for cleaning facility of solar panels | - | |
| 5. | Application Fee at KSEB | - | |
| 6. | Fee for feasibility study report at KSEB | 20 | |
| 7. | Registration Fee of ANERT | - | |
| 8. | Electrical` wiring consumables required to this project if any | - | |
| 9. | Structural Work for Solar Panel Fixing | 20 | |

Technical Specification as per ANERT

| S/N | System Component | Capacity/rating | Minimum Technical Compliance |
|-----|--|--|---|
| 1. | Solar panel | 20KWP | IEC 61215 / IS14286; IEC 61730 Part 1 & II; IEC 61701 |
| 2. | Power conditioning Unit | 20KWP | IEC 61683 / IS61683 (Efficiency 95% and above) IEC 60068-2(1,2,14,30)/ Equivalent BIS Std. IEC 62116–for islanding prevention Compliance to CEA (Distributed generation) regulation, 2013, IEC 61727 for utility interface |
| 3. | Cables | As required | IEC 60227/IS694 IEC 60502/IS1554 (Pt. I & II) |
| 4. | Switches/Circuit Breakers/Connectors | As required | IEC 60947 part I, II, III / IS60947 Part I, II, III EN50521 |
| 5. | Junction Boxes/Enclosures for Inverters/Charge Controllers | As required | IP 54 (for outdoor) or IP 65 / IP 21 (for indoor) as per IEC529 |
| 6. | Energy Meter for Recording Solar Electricity Generated | | As per CEA regulations |
| 7. | Two way meter for Distribution Licensee grid connection | | As per CEA regulations |
| 8. | Electrical Grounding(Earthling) | Separate insulated earthing for lighting arrester, separate earthing for solar module mounting structure and PCU | As per IS 3043(separate earthing for lighting arrester, module mounting frame and PCU) |
| 9 | SPD (Surge Protection Device) for AC DB and DC DB | As required | 1) IEC61643-1 2) IEC61643-11/2011 |
| 10 | HRC Fuse | Provided in DC DB | Provided in the DC DB box |



1. Bid Submission

E-Tender forms can be downloaded from the website <https://etenders.kerala.gov.in> . The interested service providers may submit the tenders online at <https://etenders.kerala.gov.in> in one bid system in the prescribed Proforma. Tenders are to be submitted only online through e-procurement portal i.e. <https://etenders.kerala.gov.in>. All the documents in support of eligibility criteria etc. are to be scanned and uploaded along with the Tender Documents. Tenders sent by any other mode will not be accepted.

2. Bid Qualification Requirements

2.1 Every tenderer should send along with his tender an Earnest Money Deposit (EMD). This may be paid by online through the e-tender website. The EMD of the disqualified tenderers will be refunded as soon as possible. The EMD of the successful tenderers may be adjusted towards the security deposit. No interest will be paid for the earnest money deposited.

2.2 Bidder must submit valid test certificates of the components (solar PV module, inverter, battery, and charge controller, if external to inverter) proposed to be supplied/used. Bids without valid test certificates will be rejected.

2.3 The bidder should have successfully installed solar photovoltaic power plants of at least 50 KWp aggregate capacity, when considering systems with minimum 1 KWp capacity, and at least one system of 10 KWp or higher capacity. Copy of work order/ bills/ certification from the purchaser regarding execution of the order should be submitted as a proof of executing the supply.

2.4 Annual turnover of the bidder should be at least Rs.50 lakhs, in any of the last three years. Documentary evidence has to be submitted in the form of certified copies of Audited statement of accounts/ Profit and loss accounts or Sale tax returns statement or certification from the Statutory Auditor.

2.5 Vendor should have at least one service centre / authorized service provider in Kerala. Detailed list with address, contact details and proof has to be submitted. If the bidder does not have such facility at the time of tendering, an undertaking agreeing to set up and intimate the same within 15 days of letter of indent, should be enclosed.

Eligibility Criteria:

1. The Bidder should be an ANERT empanelled agency (list for 20KWP on-grid).
2. The Bidders should be an Authorized System Integrator having a direct purchase and support agreement with the original equipment manufacturer (OEM). Proof for the same to be enclosed.
3. The bidder company should be ISO 9001 certified. Certificates to this effect should be enclosed with the Bid.
4. The Bidder should be an Authorized Service Provider of the Original Equipment Manufacturer. Proof of the same shall be enclosed with the Bid.
5. The bidder should have Service Centre/Service Engineer operating in or around Kottayam. Communication address and telephone numbers for the same should be provided.
5. The bidder should have similar experience of executing and maintaining on-grid solar power plant. The Contractors should enclose list of such offices with their addresses with the bid.

Terms and Conditions:

- 1) Rate quoted must be inclusive of all taxes and charges.
- 2) Minimum Twenty Five years for solar module & mounting structure and five years for all other equipments should be offered.
- 3) Items must be supplied and installed at MPTC Mattakkara by the supplier at the address given above.
- 4) Offer for supply of items is acceptable only from manufacturer or their authorized service providers/dealers. So a certificate issued by the manufacturer should be enclosed in case of dealers/service providers.
- 5) Payment will be cleared only after the installation and verification of the functioning of the power plant as per tender specification and acceptance.
- 6) EMD: 2.5% of the tendered cost may be furnished by **online**.
- 7) Performance guarantee/ Security Deposit : 5% of the contract value (agreed PAC).
- 8) Agreement: In Kerala stamp paper worth Rs.200/- may be furnished
- 9) All necessary permissions and approvals (including statutory, regulatory permissions, approvals (etc) required for carrying out and commissioning the contract work shall be the responsibility of the bidder.
- 10) Design, layout and documentation should be submitted on the completion of the work.
- 11) Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their Tenders as to the nature of the land available for installation of Solar PV panels, the form and nature of the site, the means of access to the site, the accommodation they may require, working conditions including space for stacking of materials, installation of T&P, rates of various materials to be incorporated in works, conditions affecting

accommodation and movement of labours etc. and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or effect their Tender. A Tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed.

12) The scope of work for the bidder mainly includes Site survey, Shadow analysis, complete design for optimal uses of space, engineering, manufacture, supply, storage, insurance, civil work, erection, testing & commissioning of the grid connected Roof top mounted solar PV project including Comprehensive maintenance Contract (CMC) of the project for a period of five years after commissioning.

13). The agency has to survey, analyses the climate conditions of the site and design the plant for a tentative capacity of 20 KWp suitable for the location in multiple land in the premises of MPTC Mattakkara.

14). The work has to be carried out in accordance with all the rules and regulations of Indian Electricity Act with upto date amendment. Necessary N.O.C (s) from all the concerned departments like KSEB have to be obtained by the agency before or during the execution of the project as & when required as per the requirement.

15). The successful bidder shall submit the detailed project report after award of work including drawings, system integration plans, monitoring and load detail, period of operation etc. before commencement of installation and approval from competent authority has to be taken.

Time Schedule

1. Issue of Acceptance Letter D
2. Supply of materials D + 30 days
3. Installation and commissioning of all items D + 90 days
4. Fine tuning/testing/ Troubleshooting & stabilization D + 120 days

WARRANTY: Onsite warranty for all equipments delivered and installed for this work minimum of Twenty Five years for solar module & mounting structure (*Warranty of Solar PV Modules: PV modules used in Solar power plants / systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years*) and minimum five years for other equipments and extended as per OEM Guarantee/ Warranty period. The equipment must be warranted against all manufacturing / installation defects for at least a period of 60 months (Please indicate Guarantee/ Warrantee period of the product in your tender) from the date of successful installation and acceptance. In case, a part thereof or the whole equipment is found defective the same will have to be rectified/replaced on free of charge

basis without lapse of time. In case the equipments are not repaired/replaced within the “Service” Time quoted, the Bank Guarantee will be revoked without assigning any reason.

| | | |
|------------------------------------|------------|----------|
| Last date for sale of Tender forms | 26.08.2019 | 11AM |
| Last date for receipt of Tenders | 26.08.2019 | 3PM |
| Date and time of opening | 29.08.2019 | 11.30 AM |

Further details can be had from the office during working hours. 0481 2542022

22/07/2019

PRINCIPAL

Mattakkara

Signature of Bidder

Name & Designation:

Company Seal :