



Basic Details

Organisation Chain	ANERT		
Tender Reference Number	ANERT-TECH/248/2023-T3		
Tender ID	2024_ANERT_649786_1	Withdrawal Allowed	Yes
Tender Type	Open Tender	Form of contract	EPC Contract
Tender Category	Works	No. of Covers	1
General Technical Evaluation Allowed	No	ItemWise Technical Evaluation Allowed	No
Payment Mode	Online	Is Multi Currency Allowed For BOQ	No
Is Multi Currency Allowed For Fee	No	Allow Two Stage Bidding	No

Payment Instruments

Online Bankers	S.No	Bank Name
	1	SBI MOPS

Cover Details, No. Of Covers - 1

Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical/Finance	.pdf	Technical bid
		.xls	Financial Bid
		.pdf	Financial Bid in Letter Head

Tender Fee Details, [Total Fee in ₹ * - 2,950]

Tender Fee in ₹	2,950		
Fee Payable To	Nil	Fee Payable At	Nil
Tender Fee Exemption Allowed	Yes		

EMD Fee Details

EMD Amount in ₹	50,000	EMD through BG/ST or EMD Exemption Allowed	Yes
EMD Fee Type	fixed	EMD Percentage	NA
EMD Payable To	Nil	EMD Payable At	Nil

Work / Item(s)

Title	Installation of 20 Solar LED Flood Lighting Systems in Kollengode Block Panchayath, Palakkad				
Work Description	Installation of 20 Solar LED Flood Lighting Systems in Kollengode Block Panchayath, Palakkad				
Pre Qualification Details	Please refer Tender documents.				
Independent External Monitor/Remarks	NA				
Tender Value in ₹	NA	Product Category	Solar Street Lights	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	30	Period Of Work(Days)	15
Location	Kollengode Block Panchayath	Pincode	678506	Pre Bid Meeting Place	NA
Pre Bid Meeting Address	NA	Pre Bid Meeting Date	NA	Bid Opening Place	Online
Should Allow NDA Tender	No	Allow Preferential Bidder	No		

Critical Dates

Publish Date	25-Jan-2024 01:30 PM	Bid Opening Date	31-Jan-2024 03:00 PM
Document Download / Sale Start Date	25-Jan-2024 01:30 PM	Document Download / Sale End Date	31-Jan-2024 02:00 PM
Clarification Start Date	NA	Clarification End Date	NA
Bid Submission Start Date	25-Jan-2024 01:30 PM	Bid Submission End Date	31-Jan-2024 02:00 PM

Tender Documents

NIT Document	S.No	Document Name	Description	Document Size (in KB)
		1	Tendernotice_1.pdf	NIT and Abstract

Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (in KB)
		1	Tender Documents	TD.pdf	Tender Document
	2	BOQ	BOQ_998029.xls	Financial Bid	346.00

Tender Inviting Authority

Name	CEO ANERT
Address	Office of CEO, ANERT Law College Road, Vikas Bhavan. PO, Thiruvananthapuram - 695 033

Tender Document for Installation of 20 Solar LED Flood Lighting Systems in Kollengode Block Panchayath, Palakkad

E- TENDER DOCUMENT

Notification No. ANERT-TECH/248/2023-T3

Dated: 25-01-2024

Date of Publishing of Bids : 25-01-2024

Last Date of Submission of Bids: 31-01-2024

PART-I



Agency for New and Renewable Energy Research & Technology

Vikas Bhavan. P.O, Thiruvananthapuram – 695 033, Kerala

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I.A – e Tender Notice

Notification No. ANERT-TECH/248/2023-T3

Dated: 24-01-2024

As part of MPLAD 2023-24 Scheme in Palakkad District, it is proposed to install 20 Nos. of Solar Mini Mast Flood Lighting systems each consists of 8 m mast, 4 Nos of 70W, 10400 lumen Solar Flood Lighting luminaire, 4 Nos of 200W_p Solar PV Module, 4 Nos of 1800 Wh Lithium Ferro Phosphate Battery etc. at 18 locations (1No. each in 17 locations and 3 Nos in one location) in Muthalamada Grama Panchayath. The details of the locations are provided in the table below.

Sl.No.	Scheme & Year	Location
1	MPLADS 2023-24	Kdavu ST Colony-Ward-11 (In front of Community Hall) in Muthalamada Grama Panchayath
2	MPLADS 2023-24	Kdavu ST Colony-Ward-11 (Inside of colony) in Muthalamada Grama Panchayath
3	MPLADS 2023-24	Sunkam ST Colony-Ward-11 in Muthalamada Grama Panchayath
4	MPLADS 2023-24	Ancham ST Colony-Ward-11 in Muthalamada Grama Panchayath
5	MPLADS 2023-24	Earth Dam ST Colony-Ward-11 in Muthalamada Grama Panchayath
6	MPLADS 2023-24	Poopara ST Colony-Ward-11 in Muthalamada Grama Panchayath
7	MPLADS 2023-24	Kuriyarkutty Thazhe ST Colony-Ward-11 in Muthalamada Grama Panchayath

8	MPLADS 2023-24	Kuriyarkutty Mele ST Colony-Ward-11 in Muthalamada Grama Panchayath
9	MPLADS 2023-24	Mamaruthu ST Colony-Ward-10 in Muthalamada Grama Panchayath
10	MPLADS 2023-24	Mechira ST Colony-Ward-17,16 in Muthalamada Grama Panchayath
11	MPLADS 2023-24	Thekkadi Allimooan ST Colony-Ward-11 in Muthalamada Grama Panchayath
12	MPLADS 2023-24	Thekkadi Allimooan Akkara ST Colony-Ward-11 in Muthalamada Grama Panchayath
13	MPLADS 2023-24	Thekkadi Muppathekkar ST Colony-Ward-11 in Muthalamada Grama Panchayath
14	MPLADS 2023-24	Kachithode ST Colony-Ward-11 in Muthalamada Grama Panchayath
15	MPLADS 2023-24	Thekkadi Oravanpady ST Colony-Ward-11 in Muthalamada Grama Panchayath
16	MPLADS 2023-24	Periyachola ST Colony-Ward-11 in Muthalamada Grama Panchayath
17	MPLADS 2023-24	Thekkadi junction -Ward-11 in Muthalamada Grama Panchayath
18	MPLADS 2023-24	(3 Flood Lighting Systems) at Parambikulam, in Ward-11 of Muthalamada Grama Panchayath

Thiruvananthapuram
25-01-2024

Chief Executive Officer

I.B – Abstract

Notification No.	Notification No. ANERT-TECH/248/2023-T3 Dated : 24-01-2024
Superscription	Tender Document for Installation of 20 Solar LED Flood Lighting Systems in Kollengode Block Panchayath, Palakkad
Date of release of Tender Invitation	25.01.2024
Last date of submission by the agencies	12:00 noon, 31 st January 2024
Date and time of opening of bids	1.00 pm, 31 st January 2024
Cost of Tender Form	Rs.2,950/- (Including GST)
EMD Amount	Rs.50,000/-
Availability of Tender form for submission	Tender form to be downloaded from the website http://www.etenders.kerala.gov.in
Place of opening of tender	Office of CEO, ANERT, PMG-Law College Road, Vikas Bhavan .P.O, Thiruvananthapuram - 695033, Kerala

Thiruvananthapuram
25-01-2024

Chief Executive Officer

I.C - General Terms and Conditions for e-Procurement

This e-Tender is being published for The Installation of 20 Solar LED Flood Lighting Systems in Kollengode Block Panchayath, Palakkad. The tender is invited in single cover system through e-procurement portal of Government of Kerala (www.etenders.kerala.gov.in). Prospective bidders willing to participate in this tender shall be an empanelled agency approved by ANERT for the installation of Solar Street Lighting / Flood Lighting Systems during the year 2024 and shall necessarily register themselves with above mentioned e-procurement portal.

The tender timeline is available in the critical date section of this tender published in www.etenders.kerala.gov.in

I.C.1 ONLINE BIDDER REGISTRATION PROCESS

- 1.1 Bidders should have a Class III or above Digital Signature Certificate (DSC) to be procured from any Registration Authorities (RA) under the Certifying Agency of India. Details of RAs will be available on www.cca.gov.in. Once, the DSC is obtained, bidders have to register on www.etenders.kerala.gov.in website for participating in this tender. Website registration is a one-time process without any registration fees. However, bidders have to procure DSC at their own cost.
- 1.2 Bidders may contact e-Procurement support desk of Kerala State IT Mission over telephone at 0471- 2577088, 2577188, 2577388 or 0484 – 2336006, 2332262 through email: [helpetender@gmail.com/](mailto:helpetender@gmail.com) etendershelp@kerala.gov.in for assistance in this regard

I.C.2 ONLINE TENDER PROCESS

The tender process shall consist of the following stages:

- i. Downloading of tender document: Tender document will be available for free download on www.etenders.kerala.gov.in. However, tender document fees shall be payable at the time of bid submission as stipulated in this tender document.
- ii. Pre-bid meeting: (not applicable)
- iii. Publishing of Corrigendum: All corrigenda shall be published on www.etenders.kerala.gov.in and shall not be available elsewhere.

- iv. Bid submission: Bidders have to submit their bids along with supporting documents to support their eligibility, as required in this tender document on www.etenders.kerala.gov.in. No manual submission of bid is allowed and manual bids shall not be accepted under any circumstances in response to the e tender notification before the last date of receipt of bids.
- v. In case bidder encounters any technical issues pertaining to e-Procurement system while acting on the tender, computer screen shot of the error message with date & time stamp on the web-browser along with the query shall be e-mailed by the bidder to the help desk (**helpetender@gmail.com/etendershelp@kerala.gov.in**), for resolution of the problem. At the same time, problem must be intimated to the concerned Tender Inviting Authority via email.
- vi. The time taken to ascertain, evaluate and suggest a solution for the problem reported by bidder may vary from case to case. Hence bidders are advised to submit the bid **at least 2 working days before the due date** and time of bid submission to avoid any last-minute issues that may come up.
- vii. Opening of Bid and Bidder short-listing: The single cover bids will be opened, evaluated and shortlisted as per the eligibility. Failure to submit the required documents online will attract disqualification. Price bids of the eligible bidder's will open the same day of opening and the work will be awarded.
- viii. ANERT doesn't take any responsibility for any technical snag or failure that has taken place during document upload

I.C.3 Cost of Tender Form and EMD amount

1. The Bidder shall pay tender form cost of Rs.2950/- (Inclusive of GST) and EMD of Rs.50,000/- for participating in the Tender for the Installation of Solar LED Flood Lighting Systems.
2. Online Payment modes: The tender document fees can be paid in through e-Payment facility provided by the e-Procurement system. Bidders can make payment only via Internet banking facility

State Bank of India Multi Option Payment System (SBI MOPS Gateway): Bidders are required to avail Internet Banking Facility in any of below banks for making tender remittances in eProcurement System.

A) Internet Banking Options (Retail)

1	Allahabad Bank	32	Kotak Mahindra Bank
2	Axis Bank	33	Lakshmi Vilas Bank
3	Andhra Bank	34	Mehsana Urban Co-op Bank
4	Bandan Bank	35	NKGSB Co-operative Bank
5	Bank of Bahrain and Kuwait	36	Oriental Bank of Commerce
6	Bank of Baroda	37	Punjab and Maharashtra Cooperative Bank
7	Bank of India	38	Punjab National Bank
8	Bank of Maharashtra	39	Punjab and Sind Bank
9	Bassein Catholic Co-operative Bank	40	RBL Bank
10	BNP Paribas	41	Saraswat Cooperative Bank
11	Canara Bank	42	ShamraoVithal Cooperative Bank
12	Catholic Syrian Bank	43	South Indian Bank
13	Central Bank of India	44	Standard Chartered Bank
14	City Union Bank	45	State Bank of India
15	Corporation Bank	46	Syndicate Bank
16	Cosmos Bank	47	Tamilnad Mercantile Bank
17	DCB Bank	48	Tamilnadu Cooperative Bank

1 8	Dena Bank	49	The Kalyan Janata Sahakari Bank
1 9	Deutsche Bank	50	TJSB Bank
2 0	Dhanalaxmi Bank	51	UCO Bank
2 1	Federal Bank	52	Union Bank of India
2 2	HDFC Bank	53	United Bank of India
2 3	ICICI Bank	54	Vijaya Bank
2 4	IDBI Bank	55	YES Bank
2 5	Indian Bank		
2 6	Indian Overseas Bank		
2 7	IndusInd Bank		
2 8	Jammu & Kashmir Bank		
2 9	Janata Sahakari Bank		
3 0	Karnataka Bank		
3 1	Karur Vysya Bank		

B) Internet Banking Options (Corporate)

1	Bank of Baroda	21	Laxmi Vilas Bank
2	Bank of India	22	Oriental Bank of Commerce
3	Bank of Maharashtra	23	Punjab & Maharashtra Coop Bank
4	BNP Paribas	24	Punjab & Sind Bank
5	Canara Bank	25	Punjab National Bank
6	Catholic Syrian Bank	26	RBL Bank
7	City Union Bank	27	ShamraoVithal Co-operative Bank
8	Corporation Bank	28	South Indian Bank
9	Cosmos Bank	29	State Bank of India
10	Deutsche Bank	30	Syndicate Bank
11	Development Credit Bank	31	UCO Bank
12	Dhanalaxmi Bank	32	Union Bank of India
13	Federal Bank	33	UPPCL
14	HDFC Bank	34	Vijaya Bank
15	ICICI Bank	35	Axis Bank
16	Indian Overseas Bank		
17	Janta Sahakari Bank		

1 8	Jammu & Kashmir Bank		
1 9	Karur Vysya Bank		
2 0	Kotak Bank		

During the online bid submission process, bidder shall select **SBI MOPS** option and submit the page, to view the **Terms and Conditions** page. On further submitting the same, the e-Procurement system will re-direct the bidder to MOPS Gateway, where two options namely **SBI** and **Other Banks*** will be shown. Here, Bidder may proceed as per below:

- a) *SBI Account Holders* shall click **SBI** option to with its Net Banking Facility., where bidder can enter their internet banking credentials and transfer the Tender Fee and EMD amount.
- b) *Other Bank Account Holders* may click **Other Banks** option to view the bank selection page. Here, bidders can select from any of the 54 Banks to proceed with its Net Banking Facility, for remitting tender payments.

**Transaction Charges for Other Banks vide SBI Letter No. LHO/TVM/AC/2016-17/47 – 1% of transaction value subject to a minimum of Rs. 50/- and maximum of Rs.150/-*

** Bidders who are using Other Banks option under SBI MOPS Payment Gateway, are advised by SBI to make online payment 72 hours in advance before tender closing time.*

I.C.4 SUBMISSION PROCESS

1. For submission of bids, all interested bidders have to register online as explained above in this document. After registration, bidders shall submit their Tender online on www.etenders.kerala.gov.in along with online payment of the registration fee.
2. For page-by-page instructions on bid submission process, please visit www.etenders.kerala.gov.in and click “Bidders Manual Kit” link on the home page.
3. It is necessary to click on “Freeze bid” link/ icon to complete the process of bid submission otherwise the bid will not get submitted online and the same shall not be available for viewing/ opening during bid opening process.

I.C.5 VALIDITY OF TENDER OFFER

1. The Tender offer will be valid for a period of 6 months from the last date of submission of tender.
2. Further, ANERT may extend the validity of the Bids without altering the general and technical criteria of Bid for further periods, if so required

I.C.6 DEVIATIONS

1. The offers of the bidders with Deviations of the Tender Document are liable for rejection.

I.C.7 BLACK LIST

1. All the intending bidders shall agree that in the event of the documents furnished with the offer being found to be bogus or the documents contain false particulars, they shall be black listed for future tenders/ association with ANERT and registration fee paid shall be forfeited against any losses incurred by ANERT.

I.C.8 BIDDER'S LOCATION

1. The bidders are requested to furnish the exact location of their factories/godown with detailed postal address and pin code, telephone and fax nos. etc. in their tenders to arrange inspection by ANERT, if considered necessary.
2. All communication shall be made to the registered email of the bidder in the e-tendering systems and ANERT shall not be responsible for non-receipt or delay of any such communication.

I.C.9 CONFLICT OF INTEREST

- i. The registered vendors are required to provide professional, objective, and impartial services, at all times holding ANERT's interests paramount, strictly avoiding conflicts with other assignments or its own corporate interests, and acting without any consideration for future work. The supplier has an obligation to disclose to ANERT any situation of actual or potential conflict that impacts its capacity to serve the best interest of ANERT. Failure to disclose such situations may lead to the disqualification of the supplier or the termination of its Contract and/or sanctions by the Government.
- ii. Relationship with the ANERT staff: a service Provider (including its subsidiaries /partners) that has a close business or family relationship with a professional staff of

the ANERT who are directly or indirectly involved in any part of the preparation of the Terms of Reference for the assignment, the selection process for the Contract, or the supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to ANERT throughout the selection process and the execution of the Contract. Any other types of conflicting relationships as indicated in the document

I.C.10 CONFIDENTIALITY

- i. From the time the proposals are opened to the time the Contract is awarded, the agency (ies) should not contact any of the officials of ANERT on any matter related to its Technical and/or Financial Proposal. Information relating to the evaluation of Proposals and award recommendations shall not be disclosed to the agency (ies) who submitted the Proposals or to any other party not officially concerned with the process, until the publication of the Contract award information.
- ii. Any attempt by the agency (ies) or anyone on behalf of the Suppliers to influence improperly ANERT in the evaluation of the Proposals or Contract award decisions may result in the rejection of its Proposal and may be subject to the application of prevailing Government sanctions procedures.
- iii. Notwithstanding the above provisions, from the time of the Proposals" opening to the time of Contract award publication, if an agency (ies) intends to contact ANERT on any matter related to the selection process, it should do so only in writing.
- iv. Proposals must be direct, concise, and complete. ANERT will evaluate bidder's proposal based on its clarity and the directness of its response to the requirements of the project as outlined in this document. Bidders shall furnish the required information on their technical and financial proposals in the enclosed formats only. Any deviations in format or if the proper information is not provided properly, the bidder will be liable for rejection. The Evaluation committee may seek clarification, if required, while evaluating the proposal.

I.C.11 APPLICABLE LAW

The work order shall be governed by the laws and procedures established by Government of Kerala, within the frame work of applicable legislation and enactment made from time to time concerning such commercial dealings. Any default in the terms and conditions of the document by the service provider will lead to rejection of work order.

I.C.12 AMENDMENT OF TENDER DOCUMENT

At any time prior to the deadline for submission of the bid, ANERT may for any reason, modify the document. The amendment document/ corrigendum shall be notified through the website www.anert.gov.in and such amendments shall be binding on all the bidders.

I.C.13 GOVERNMENT OF KERALA - CORRUPT AND FRAUDULENT PRACTICES

ANERT follows the policy of the Government of Kerala for anti-corruption and fraudulent practices to maintain sound procurement principles of open competition, economy and efficiency, transparency, and fairness. The selected service provider shall permit the representative of ANERT to inspect the accounts, records and other documents relating to the submission of the proposal and execution of the contract, in case of award of the contract work.

I.D.1 BID QUALIFICATION AND ELIGIBILITY REQUIREMENTS

1. Prospective bidders willing to participate in this tender shall be an empanelled agency approved by ANERT for the installation of Solar Street Lighting / Flood Lighting Systems during the year 2024
2. **Annexure A** on letter head of the bidder firm, an agreement on Rs.200/- Kerala stamp paper as per the format given in **Annexure B** and **Annexure C** must be submitted along with Tender document.
3. The bidders should quote their allowable rate of price inclusive of expenses related to transportation, handling, supply, installation and commissioning and inclusive of applicable taxes.
4. The uploaded bid document shall necessarily contain the scanned copies of the whole tender document signed and stamped by the authorized signatory of the bidder for the acceptance of all the tender conditions. No relaxation or change in the tender conditions will be allowed.
5. The technical specifications of this particular tender will supersede the technical conditions for empanelment 2024
6. Since the work is of urgent nature owing to impending elections lowest bidder L1 has to submit at least 50 % of the materials at sites within two weeks of issue of the work order, failing which second lowest bidder L2 will be given opportunity, provided he is agreeing to match the rate and supply materials with similar conditions.

I.E Conditions of Contract

I.E.1 GENERAL CONDITIONS

- 1.** The bids should be as per the prescribed form which should be downloaded from the website www.etenders.kerala.gov.in. Bids that are not in the prescribed form are liable to be rejected. Bids subject to conditions will not be considered. They are liable to be rejected on that sole ground.
- 2.** The listed OEM / Distributor should be prepared to guarantee satisfactory performance for a period of guarantee under a definite penalty. Communication of acceptance of the bid normally constitutes a concluded contract. Nevertheless, the successful bidder shall also execute an agreement, with appropriate stamp value required for public works, for the due fulfillment of the contract within the period to be specified in the Registration order to be issued. The contractor shall have to pay all stamp duty, Lawyer's charges and other expenses incidental to the execution of the agreement. Failure to execute the agreement within the period specified will entail the penalties set out below:
- 3.** A non-refundable licensing fee of 2.5% has to be remitted by tenderer for all the works undertaken by them on behalf of ANERT. This will be deducted from the payment during release of payment. The successful tenderer shall before sign the agreement and within the period specified in the letter of acceptance of his tender, deposit a sum equivalent to 3% of the value of the contract as security for the satisfactory fulfillment of the contract less the amount of money deposited by him along with his tender. The amount of security may be deposited in the manner prescribed to be specified in the work order issued by ANERT.
- 4.** There will be no exemption for MSEs in depositing this security amount. If the successful tenderer fails to deposit the security and execute the agreement as stated above, the EMD deposited by the bidder will be forfeited to ANERT and contract arranged elsewhere at the defaulter's risk and any loss incurred by ANERT on account of the purchase will be recovered from the defaulter who will however not be entitled to any gain accruing thereby.
- 5.** In cases where a successful tenderer, after having made partial supplies fails to fulfil the contracts in full, all or any of the materials not supplied may at the discretion of the Purchasing Officer be purchased by means of another tender/quotation or by negotiation or from the next higher tenderer who had offered to supply already, and the loss if any caused to ANERT shall thereby together with such sums as may be fixed by ANERT towards damages be recovered from the defaulting tenderer.
- 6.** If the contractor fails to deliver all or any of the stores or perform the service within the time/period(s) specified in the contract, the purchaser shall without prejudice to its other remedies under the contract, deduct from the contract prices, as liquidated damages, a sum equivalent to 0.5 % of the delivered price of the delayed stores or unperformed services for each week of delay until actual delivery or performance, up to a maximum deduction of 10% of the contract price of the delayed stores and services. Once the maximum is reached, the purchaser may consider termination of the contract at the risk and cost of the contractor.

7. The Security deposit shall, subject to the conditions specified herein be returned to the contractor within three months after the expiration of the contract but in the event of any dispute arising between ANERT and the contractor, ANERT shall be entitled to deduct out of the deposits or the balance thereof, until such dispute is determined the amount of such damages, costs, charges and expenses as may be claimed. The same may also be deducted from any other sum which may be due at any time from ANERT to the contractor. In all cases where there are guarantee for the goods supplied, the security deposit will be released only after the expiry of the guarantee period.

8. All payments to the contractors will be made by ANERT/concerned in due course as mentioned in this document. As the work is under MPLAD scheme, the payment will be transferred only after completion of the work. Once the work is completed, 90% of the contract value will be released upon certification of authority at ANERT. The balance 10% will be kept as retention amount and will be released in parts – 5% upon completion of 1st of operation and the balance 5% on completion of warranty period.

9. All incidental expenses incurred by ANERT for making payments outside the State in which the claim arises shall be borne by the contractor

10. Payments will be made only after the supply, installation and commissioning of the items and certification by the competent technical personnel of ANERT.

11. The contractor shall not assign or make over the contract on the benefits or burdens thereof to any other person or body corporate. The contractor shall not underlet or sublet to any person or persons or body corporate the execution of the contract or any part thereof without the consent in writing of the purchasing officer who shall have absolute power to refuse such consent or to rescind such consent (if given) at any time if he is not satisfied with the manner in which the contract is being executed and no allowance or compensation shall be made to the contractor or the subcontractor upon such rescission. Provided always that if such consent be given at any time, the contractor shall not be relieved from any obligation, duty or responsibility under this contract.

12. In case the contractor becomes insolvent or goes into liquidation, or makes or proposes to make any assignment for the benefit of his creditors or proposes any composition with his creditors for the settlement of his debts, carries on his business or the contract under inspection or behalf of or his creditors or in case any receiving order(s) for the administration of his estate are made against him or in case the contractor shall commit any act of insolvency or in case in which under any clause or clauses any act of insolvency or in case in which under any clause(s) of this contract the contractor shall have rendered himself liable to damages amounting to the whole of his security deposits, the contract shall, thereupon, after notice given by the Purchasing Officer to the contractor, be determined and ANERT may complete the contract in such time and manner and by such persons as ANERT shall think fit. But such determination of the contract shall be without any prejudice to any right or remedy of ANERT against the contractor or his sureties in respect of any breach of contract committed by the contractor. All expenses and damages caused to ANERT by any breach of contract by the contractor shall be paid by the contractor to ANERT and may be recovered from him under the provisions of the Revenue Recovery Act in force in the State.

13. In case the contractor fails to supply and deliver any of the said articles and things within the time provided for delivery of the same, or in case the contractor commits any breach of any of the covenants, stipulations and agreements herein contained, and on his part to be observed and performed, then and in any such case, it shall be lawful for ANERT (if they shall think fit to do so) to arrange for the purchase of the said articles and things from elsewhere or on behalf of ANERT by an order in writing under the hand of the CEO put an end to this contract and in case ANERT shall have incurred sustained or been put to any costs, damages or expenses by reason of such purchase or by reason of this contract having been so put an end to or in case any difference in price, compensation, loss, costs, damages, expenses or other moneys shall then or any time during the continuance of this contract be payable by the contractor to ANERT under and by virtue of this contract, it shall be lawful for ANERT from and out of any moneys for the time being payable or owing to the contractor from ANERT under or by virtue of this contract or otherwise to pay and reimburse to ANERT all such costs, damages and expenses they may have sustained, incurred or been put to by reason of the purchase made elsewhere or by reason of this contract having been so put an end to as aforesaid and also all such difference in price, compensation, loss, costs, damages, expenses and other moneys as shall for the time being payable by the contractor aforesaid.

14. Any sum of money due and payable to the contractor (including security deposit returnable to him) under this contract may be appropriated by the CEO or any other person authorised by ANERT and set off against any claim of ANERT for the payment of a sum of money arising out of or under any other contract made by the contractor with ANERT or any other person authorised by ANERT. Any sum of money due and payable to the successful tenderer or contractor from ANERT shall be adjusted against any sum of money due to ANERT from him under any other contracts.

15. Every notice hereby required or authorised to be given may be either given to the contractor personally or left at his residence or last known place of abode or business, or may be handed over to his agent personally, or may be addressed to the contractor by post at his usual or last known place of abode or business and if so addressed and posted, shall be deemed to have been served on the contractor on the date on which in the ordinary course of post, a letter so addressed and posted would reach his place of abode or business.

16. Conditions in the technical document and technical specifications of this document would override these general conditions, wherever applicable.

17. ANERT, by notice sent to the Supplier, may terminate the contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for ANERT's convenience, the extent to which performance of the Supplier under the contract is terminated, and the date upon which such termination becomes effective.

18. In case any difference or dispute arises in connection with the contract, all legal proceedings relating to the matter shall be instituted in the Court within whose jurisdiction the CEO, ANERT voluntarily resides.

19. The Courts situated at the place where the headquarters of ANERT is situated viz, Thiruvananthapuram alone will have jurisdiction to entertain civil suits and all other legal pertaining to this contract.

I.F TECHNICAL SPECIFICATIONS FOR SOLAR LED FLOOD LIGHTING SYSTEMS

1. The system installed should conform to the minimum technical requirements by ANERT as indicated below.
2. The approved make and model number of components enlisted in the Empanelment during 2024 for the installation of Solar Street Lighting / Flood Lighting Systems with additional features specified in this e tender should be used for the work.
5. The commencement of the work should be intimated to the Hon'ble Member of Parliament, Kollangodu Block Panchayath Authorities and the District Authority of ANERT and the work should be done under constant supervision of the representative of the Palakkad District Office of ANERT.

I.F.1 White LED Based Solar Flood Lighting Systems

A stand- alone solar photovoltaic street lighting system is an outdoor lighting unit used for illuminating a street or an open area. A solar street lighting system consists of a PV Module, control electronics, storage battery, W-LED based Luminaire, inter connecting cables and module mounting pole including hardware and battery box. The luminaire is based on White Light Emitting Diode (W-LED), a solid state device which emits light when electric current passes through it. The luminaire is mounted on the pole/ mast at a suitable angle to maximize illumination on the ground. The PV module is placed at the top of the pole facing South direction at an inclination of 10 degree from horizontal. The system should be installed at a place where direct sunlight falls on the PV modules without any hindrance. There should not be any shadows falling on the PV modules during day time. The battery placed inside the battery box is charged by electricity generated by the PV module during day time and the luminaire provides light from dusk to dawn. The system lights at dusk and switches off at dawn automatically. During the dusk to dawn operation, the brightness of the LED will be reduced by 50% for 4 hours for saving power from 12 mid night to 4 am (Timing subject to site specific conditions)

The LED based solar flood lighting systems should be with the following minimum rated parameters.

Mini Mast Solar Flood Lighting System (Non integrated with 50% dimming for 4 hours)

Total Quantity: 20 Nos each consists of:

LED Luminaire	70W , 10400 lumen x4 Nos
Solar Module (Poly/Mono Crystalline Silicon)	200Wp x4 Nos
Battery (Lithium Ferro Phosphate) Nos	1800 Wh x 4 Nos or (140 Ah, 12.8 V) x 4

The make, model number, country of origin and technical characteristics (**including LM-80, LM-79 report**) of white LEDs/LED Luminaire used in the lighting system must be furnished. The enclosure of luminaire should be with **IP66** protection.

I.F.5 BATTERY

Lithium Ferro Phosphate Battery.

Battery should conform to the latest BIS/International standards (IEC 62133).

- Battery should have minimum 5 year warranty.
- The battery should be fixed at a minimum height of 3 metre from ground level on the pole in a battery box with **IP66** protection.

I.F.6 PV MODULE

- The PV module(s) should be indigenously manufactured and contain crystalline silicon cells. (Poly crystalline or Mono crystalline). It required to have certificate for the supplied PV module as per IEC 61215, IEC 61730 and IEC 61701 specifications or equivalent BIS specifications.
- The power output of the PV module must be reported under standard test conditions (STC) at 16.4 volt load voltage. I-V curve of the sample module should be submitted.
- The open circuit voltage of the PV modules under STC should be at least 21.0 volt.
- The PV module efficiency should be above 14 %.
- The terminal box on the module should have a provision for opening for replacing the cable, if required.
- Each PV module should be provided with RF identification tag. The following information must be mentioned in the RFID used on each module (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions.)
 - a) Name of the Manufacturer or distinctive Logo
 - b) Model or Type No.
 - c) Serial No.
 - d) Year of make

I.F.7 ELECTRONICS, INCLUDING PROTECTIONS

- The total electronic efficiency should be at least 90%.
- Electronics should operate at 24V/36V/48V and should have temperature compensation for proper charging of the battery throughout the year.
- The light output should remain constant with variations in the battery voltages.

- The system should have protection against battery overcharge and deep discharge conditions.
- Fuse should be provided to protect against short circuit conditions.
- A blocking diode should be provided as part of the electronics, to prevent reverse flow of current through the PV module(s). In case such a diode is not provided with the PV module, full protection against open circuit, accidental short circuit and reverse polarity should be provided.
- The charge controller should be incorporate with MPPT. Programmable facility should be incorporated for regulating dimming of the luminaire.
- Adequate protection to be provided against battery reverse polarity
- Adequate protection is to be incorporated under No Load conditions.
- Load reconnect should be provided at 60% of the battery capacity status.
- Necessary lengths of wires / cables and appropriate fuses should be provided.

I.F.8 MECHANICAL COMPONENTS AND INSTALLATION

Aluminum frame structure, with anodizing to be fixed on the pole to hold the SPV module. The frame structure should be inclined at an angle of 10 degree from the horizontal to mount the PV module. The luminaire should be fixed to the pole on aluminium arm. The Aluminum arm for holding the luminaire should have suitable length and should be set at a suitable angle to maximize lux of desired level over the specified area.

A vented ABS/Alluminium box (IP66 protection) with suitable structure to be fixed on the pole for housing the storage battery with locking arrangement facility.

All mechanical metallic parts shall be of aluminium/ stainless steel of suitable thickness to withstand loads including wind loads and should have good aesthetic appearance. All external parts should be Aluminium/Stainless Steel and should be replaced during the warranty period in case of any defects. All nuts and bolts used should be of stainless steel.

The foundation of the mast should be of M25 grade concrete 750mm x 750mm x 1500mm below ground level and 200 mm above ground level. PCC of 100mm thickness shall be done after earth compacting, 12 mm and 8 mm dia reinforcement also to be used.

The mast should be of G.I . Height of the mast should be 8 metre with minimum 210 mm size at bottom and 90 mm size at top. The foundation base plate should be of size 350mmx 350mm x 25 mm fixed above ground level. The minimum thickness of the G.I shaft shall be 4 mm. The system shall include ring arm bracket for mounting luminaires, bracket for mounting PV modules and battery box.

I.F.9 INDICATORS

- The system should have two indicators, green and red.
- The green indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged.
- Red indicator should indicate the battery “Load Cut Off” condition

I.F.10 OTHER FEATURES

1.A plaque in Marble or Granite carrying the inscription “MPLADS 2023-24” indicating the name of work, cost involved, the commencement, completion and inauguration dates and the name of the MP, implementing agency sponsoring the project should be permanently erected.

2. There will be a Name Plate (12” X 6”) on the pole(2 m above ground level), which should be displayed with the following details

- a) Name of the supplier.
- b) Phone number of service centres.
- c) Date of installation.
- d) Name of Implementing Agency.

Quality stickers with post number will have to be provided on the pole.

I.F.11 QUALITY AND WARRANTY

Components and parts used in White LED solar street lighting systems should conform to the latest BIS/ International specifications, wherever such specifications are available and applicable. A copy of the test report/ certificate stating conformity of BIS/ International standards must be submitted.

White LED solar street lighting system including the battery will be warranted for a period of 5 years from the date of commissioning.

The PV module used should be warranted for its output peak watt capacity, which should not be less than 90% at the end of 10 (ten) years.

I.F.12 DOCUMENTATION

An Operation, Instruction and Maintenance Manual, in English and Malayalam, should be provided with the solar street lighting system. Besides other information the Manual should contain the following minimum details:

- a) About Photo Voltaics. A small write up (with a block diagram) on PV Module, electronics, lamps and battery.

- b) About White LED solar street lighting system - its components and expected performance The make, model number, country of origin and technical characteristics of W-LEDs should be stated in the product data sheet
- c) Clear instructions about mounting of pole, grouting details, fixing of PV module, battery and luminaire., clear wiring instructions with line diagram
- d) About significance of indicators
- e) DO's and DONT's
- f) Clear instructions on regular maintenance and trouble shooting of the system
- g) Name and address of the person or service centre to be contacted in case of failure or complaint.

ANNEXURE A
Format for Covering Letter

(On the official letter head of the Bidder signed by authorised signatory)

Sir,

I/We hereby offer e-tender to supply, under annexed terms and conditions of contract, the whole of the articles referred to and described in the attached specification and quantity decided by the Agency for New and Renewable Energy Research and Technology (ANERT), at the rates quoted for the Installation of 20 Solar LED Flood Lighting Systems in Kollengode Block Panchayath, Palakkad

The work allotted to me/us will be completed within the time frame as per the work order from ANERT.

I am/we are remitting herewith the required amount of Rs. 50,000/- as EMD by electronic payment vide transaction No.dt:.....

Yours faithfully,

Place:

Signature:

Date:

Name:

Designation:

(Office Seal)

(This letter to be submitted on the official letter head of the Agency, signed by the authorised signatory.)

Annexure B - Undertaking by the Agency

(In Kerala stamp paper worth Rs. 200/- (Rupees two hundred only))

I (Name, Designation) authorised signatory of (Name and full address of the EPC contractor /Public sector undertaking) hereby undertake that

1. The solar devices supplied/installed in various Govt. departments in Kerala shall be as per technical specification stipulated by ANERT/ MNRE. The wiring and installation shall be done as per the recommended installation practices and by using components as per the prescribed Technical Specifications.
2. All the Solar Devices supplied and installed should be given warranty for 5 years.
3. Solar modules will have warranty of 90% of rated output at the end of 10 years.
5. The rates quoted include transportation, handling, installation and commissioning charges.
6. At least one service centre will be maintained in Palakkad or adjacent districts. Details of service centers provided are true and correct.
7. **No alteration in the downloaded document is made. If any alterations are detected at any stage, my offer is liable to be rejected.**
8. All the components of solar devices supplied should be approved by ANERT before installation.
9. All the above terms and conditions are acceptable to me/us.

Date:

Signature of the authorised signatory:

Name:

Designation:

(Office Seal)

Annexure C -Declaration by the Bidder

e-Tender Notification No:, dtd for
The Installation of 20 Solar LED Flood Lighting Systems in Kollengode Block Panchayath,
Palakkad

To

The CEO

ANERT

We, the undersigned, declare that:

1. We have examined and have no reservations to the Bidding Document, including Addenda No.: (if any)
2. We offer to supply in conformity with the Bidding Document and in accordance with the delivery schedule
3. Our Bid shall be valid for a period of 6 months from the date fixed as deadline for the submission of tenders in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
4. If our Bid is accepted, we commit to submit a Security Deposit in the amount of 3 percent of the Contract Price;
5. We are not participating, as Bidders, in more than one Bid in this bidding process;
6. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed.
7. We declare that our firm is not currently black listed by MNRE or any other State Govt. agencies.

Signature

Date

Name

Seal

Tender Document for Installation of 20 Nos of Solar LED Flood Lighting Systems in Kollengode Block Panchayath, Palakkad.

PRICE SCHEDULE

Notification No. ANERT-TECH/248/2023-T3

Dated :24-01-2024

PART-II

Submitted by (Name and address of bidder)	:
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Agency for New and Renewable Energy Research and Technology

Vikas Bhavan (PO), Thiruvananthapuram – 695 033, Kerala
Phone: (91-471) 2334122, 2334124, 2331803 (office), 2329854 Fax: (91-471) 2329853

Web: <http://www.anert.gov.in> **email:** ceo@anert.in

II- Price Schedule

B2- Price Schedule for supply, installation and commissioning of 20 Nos of Solar Flood Lighting Systems

1. Name of the Agency :

2. Address in Full :

Rating of Luminaire	Capacity of Module	Price for 20 Nos (all-inclusive in Rupees)	
		In digits	In words
4 Nos x 70 W or 10400 lumen	4 x 200 W		

The price quoted by the bidder for each configuration shall be inclusive of cost of pre-installation survey report, transportation, handling, supply and commissioning and cost of insurance, taxes if any and including warranty etc.

Date:

Signature of the authorised signatory:

Name:

Designation:

(Office Seal)

Tender Document for Installation of Solar LED Flood Lighting Systems in Kollengode Block Panchayath. (Notification No. ANERT-TECH/248/2023-T3 Dtd:24-01-2024