eTendering System Government of Kerala

Tender Details

Date : 10-Nov-2023 06:25 PM

Print

Basic Details

Organisation Chain	ANERT		
Tender Reference Number	ANERT-TECH/252/2023-		
Tender ID	2023_ANERT_621349_1	**Withdrawal Allowed**	Yes
Tender Type	Open Tender	**Form of contract**	Empanelment
Tender Category	Works	**No. of Covers**	2
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

	S.No	Bank Name
Online Bankers	1	SBI MOPS

Cover Details, No. Of Covers - 2

Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical	.pdf	Pre Qualification documents
		.pdf	Technical Bid
2	Finance	.xls	Financial Bid
		.pdf	Financial Bid

Tender Fee Details, [Total Fee in ₹ * - 50,000]

Tender Fee in ₹	50,000		
Fee Payable To	Nil	**Fee Payable At**	Nil
Tender Fee Exemption Allowed	Yes		

EMD Fee Details

EMD Amount in ₹	0.00	**EMD through BG/ST or EMD Exemption Allowed**	No
EMD Fee Type	fixed	**EMD Percentage**	NA
EMD Payable To	Nil	**EMD Payable At**	Nil

Work /Item(s)

Title	Invitation of Expression of Interest (EoI) for Empanelment of Agencies for supply and installation of solar powered devices (below 1kW) in Kerala under Distributed Power Generation (Off Grid) Programme				
Work Description	Invitation of Expression of Interest (EoI) for Empanelment of Agencies for supply and installation of solar powered devices (below 1kW) in Kerala under Distributed Power Generation (Off Grid) Programme				
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	Empanelment	**Bid Validity(Days)**	365	**Period Of Work(Days)**	30
Location	All over Kerala	**Pincode**	695001	**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	10-Nov-2023 06:00 PM	**Bid Opening Date**	01-Dec-2023 01:00 PM
Document Download / Sale Start Date	10-Nov-2023 06:00 PM	**Document Download / Sale End Date**	30-Nov-2023 12:00 PM
Clarification Start Date	NA	**Clarification End Date**	NA
Bid Submission Start Date	10-Nov-2023 06:00 PM	**Bid Submission End Date**	30-Nov-2023 12:00 PM

Tender Documents

NIT Document

S.No	Document Name	Description	Document Size (in KB)
1	Tendernotice_1.pdf	NIT and Abstract	200.63

Work Item Documents

S.No	Document Type	Document Name	Description	Document Size (in KB)
1	Tender Documents	Empanelment.pdf	Tender Document	1012.77
2	BOQ	BOQ_934409.xls	Financial Bid	366.00

Tender Inviting Authority

Name	CEO ANERT
Address	Office of CEO, ANERT, PMG-Law College Road, Vikas Bhavan PO, Thiruvananthapuram - 695033

Invitation of Expression of Interest (EoI) for Empanelment of Agencies for Supply and Installation of Solar Powered Devices (below 1kW) in Kerala under Distributed Power Generation Programme. (Off Grid)

E- TENDER DOCUMENT

Notification No. ANERT-TECH/252/2023-T3

Dated 10.11.2023

Date of Publishing of Bids : 10-11-2023

Last Date of Submission of Bids: 30-11-2023

PART-I

Agency for New and Renewable Energy Research & Technology

Vikas Bhavan . P.O, 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

Contents

I.A – e Tender Notice

Notification No. ANERT-TECH/252/2023-T3

Dated: 08.11.2023

As per Circular No.DA1/244/2017-LSGD dated 2.6.2017, Local Self Government Department, Government of Kerala, has given guidelines for the implementation of solar projects and also informed that Quotation/ Tender for solar projects should be invited from the empanelment list of ANERT. Based on this, ANERT has decided to prepare the list of Empanelled Agencies for implementation of solar P V devices below 1 kW capacity. Hence Expression of Interest (EoI) in accordance with the attached pre-qualification criteria, technical specifications and financial terms and conditions are invited from experienced EPC contractors, public sector undertakings and State Government Agencies for the supply and installation of solar photovoltaic devices.

Empanelment List of Agencies will be published for each category only if minimum 3 Agencies are available for enlistment in each category. The Agencies which ever qualify the empanelment criteria will be included in the Empanelment List for supply and installation of SPV devices for two years within the State. EoI is invited for the supply and installation of the following two categories of products.

1. Solar Lanterns
2. Solar Street lighting Systems

The offers have to be submitted based on the qualification criteria and as per the bid submission guidelines. This empanelment list will be valid for the procurement of the above devices for all programmes implemented by ANERT including State Plan Programmes, MNRE aided programmes, Deposit work, Consultancy work and for the projects of LSG Department and Govt. Institutions.

Price offers have to be submitted for the Solar Lantern and Solar Street Lighting system proposed to be implemented by ANERT. The application form including guidelines and documents for Expression of Interest can be downloaded from the e tendering website of Govt. of Kerala. The bids should be submitted on or before 12 noon, 29th November 2023.

The registration fee to be remitted is Rs.50,000/-. The Empanelment Programme will be continued even after the last date of submission of bids. ie, with effect from 01-02-2024 for giving opportunity to other vendors to participate by remitting the registration free. The submitted documents will be evaluated and qualified bidders shall be included in the empanelment list. The validity of the list will be for two years. This list will be updated as and when required. The agencies already remitted the registration fee previously for the empanelment under "Supply and Installation of Solar Powered Devices (below 1kW) in Kerala under Distributed Power Generation. (Off Grid)" need not remit the registration fee again to participate in this empanelment process.

Thiruvananthapuram
10-11-2023

Chief Executive Officer

I.B – Abstract

Notification No.	***Notification No. ANERT-TECH/252/2023-T3*** **Dated :08.11.2023**
Superscription	Invitation of Expression of Interest (EoI) for Empanelment of Agencies for supply and installation of solar powered devices (below 1kW) in Kerala under Distributed Power Generation (Off Grid) Programme
Date of release of Invitation	10.11.2023
Date of submission EoI by the agencies	12:00 noon, 30th November 2023
Date and time of opening of bids	1.00 pm, 01st December 2023
Application fee	Rs.50,000/- (Including GST)
Availability of Tender form for submitting EoI	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 PO, Thiruvananthapuram - 695033, Kerala

Thiruvananthapuram
10-11-2023

Chief Executive Officer

I.C - GENERAL TERMS AND CONDITIONS FOR e-PROCUREMENT

This e-Tender is being published for Invitation of Expression of Interest (EoI) for Empanelment of Agencies for supply and installation of solar powered devices (below 1kW) in Kerala under Distributed Power Generation (Off Grid) Programme. The tender is invited in two cover system through e-procurement portal of Government of Kerala (www.etenders.kerala.gov.in). Prospective bidders willing to participate in this tender 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/ etendershelp@kerala.gov.in for assistance in this regard

I.C.2 ONLINE TENDER PROCESS

1.3 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.

I.C.3 DOCUMENTS COMPRISING BID:

1.4 The 1st Part of the bid shall contain the scanned copies of the following documents which every bidder has to upload:

i. Copy of registration certificate issued by registrar of companies or other competitive authority under which the firm is registered

ii. Copy of valid GST registration certificate

iii. Power of attorney for the authorized signatory to sign the documents

iv. Documentary evidence such as MoU /Agreement with service centre

v. Technical compliance certificates/ Test reports for the items being registered and valid as on date of submission

vi. Documentary evidence such as audited statement from a registered Chartered Accountant to meet the annual turnover criteria.

vii. Copy of PANCARD of the bidder

viii. Covering letter as per Annexure A

ix. Undertaking of the agency in the prescribed format (Annexure B) on Govt. of Kerala stamp paper worth Rs.200/-

x. List of solar lanterns supplied (Annexure C) along with copy of work orders and work completion certificates

xi. List of solar SLS installed (Annexure D) along with copy of work orders and work completion certificates

xii. List of Service Centres of the Bidder (Annexure E)

xiii. Declaration by the Bidder (format as in Annexure F)

xiv. Declaration of relationship with ANERT employee (Annexure G)

xv. Technical bid submission form (Annexure H)

xvi. System Components (Annexure I)

xvii. Addendum to the EoI document, if any, signed by the bidder on all pages

1.5 ANERT doesn't take any responsibility for any technical snag or failure that has taken place during document upload.

I.C.4 VENDOR REGISTRATION FEE

1.6 The Bidder shall pay, a one-time Registration fee of Rs. 50,000/-for registering with ANERT for participating in the EoI for the supply of solar devices under this programme.

1.7 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
18	Dena Bank	49	The Kalyan Janata Sahakari Bank
19	Deutsche Bank	50	TJSB Bank
20	Dhanalaxmi Bank	51	UCO Bank
21	Federal Bank	52	Union Bank of India
22	HDFC Bank	53	United Bank of India
23	ICICI Bank	54	Vijaya Bank
24	IDBI Bank	55	YES Bank
25	Indian Bank		
26	Indian Overseas Bank		
27	IndusInd Bank		
28	Jammu & Kashmir Bank		
29	Janata Sahakari Bank		
30	Karnataka Bank		
31	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	ShamraoVitthal 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	JantaSahakari Bank		
18	Jammu & Kashmir Bank		
19	Karur Vysya Bank		
20	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.5 SUBMISSION PROCESS

1.8 For submission of bids, all interested bidders have to register online as explained above in this document. After registration, bidders shall submit their EoI online on www.etenders.kerala.gov.in along with online payment of the registration fee.

1.9 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.

1.10 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.6 VALIDITY OF REGISTRATION

1.11 Once registered, the registration will be valid for a period of 2 years from the date of registration.

1.12 Further, ANERT may extend the validity of the Bids without altering the general and technical criteria Bid for further periods, if so required

I.C.7 DEVIATIONS

1.13 The offers of the bidders with Deviations of the EoI Document are liable for rejection.

I.C.8 BLACK LIST

1.14 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.9 BIDDER'S LOCATION

1.15 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.

1.16 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.10 CORRUPT AND FRAUDULENT PRACTICES

ANERT requires compliance with its policy in regard to corrupt and fraudulent/prohibited practices as set forth in this proposal. In further pursuance of this policy, the selected service Provider(s) shall permit ANERT or its representatives to inspect the accounts, records and other documents relating to the submission of the Proposal and execution of the contract, in case of award, and to have the records inspected by ANERT.

I.C.11 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.12 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 a 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.13 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.14 AMENDMENT OF EOI 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.15 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. ANERT requires the agency (ies) to observe the following Government manuals (amended from time-to-time) during the selection process and in execution of such contracts The Kerala Financial Code (KFC), 2008 (7th Edition, 1st Edition was in 1963), The Stores Purchase Manual (SPM), 2013.

I.D. Vendor Registration Process and Implementation Plan

I.D.1 GENERAL

i. ANERT proposes to invite this Expression of Interest (EoI) for Empanelment of Agencies such as vendors, OEMs, Distributors, Govt. and Non Govt. Agencies for supply and installation of solar powered devices (below 1kW) in Kerala under Distributed Power Generation (Off Grid) Programme
ii. On evaluation of the technical and financial bids, the qualified agencies shall enter into an agreement (on Kerala Stamp Paper) with ANERT agreeing to implement projects in Kerala including service facility.
iii. The validity of the listing will be for two years. The list of vendors selected through this process will be published for the information of proponents for installation of Solar Lighting Systems for use by ANERT. The status of registration of any agencies

in this list shall be terminated if it is found the agency is violating empanelment conditions.

iv. The applicant should not have any pending litigation with ANERT

v. The beneficiary LSG department /Government institution /any other proponent shall have the freedom to select an agency of their choice from the list of Agencies published by ANERT through this process, for installation / supply of solar lanterns / solar street lighting of flood lighting systems. However, for Government funded programmes, necessary formalities based on store purchase rules / any other relevant guidelines in force may also be observed. The price offers to be submitted in Govt. Depts. and other institutions should not exceed the approved price of ANERT

vi. For Deposit Works executed by ANERT, separate price offers may be invited based on the site specific requirements. The list finalized by this empanelment process based on the technical qualification will be the base list for this process.

vii. The installation of these devices should be as per the technical compliance and installation practices of MNRE, ANERT, CEA and all other statutory regulations specified. Any amendments/ modification issued time to time, in this regard will be incorporated.

viii. Deposit work/ Consultancy work entrusted to ANERT by various institutions / firms for the supply/ installation of solar lantern and solar LED street lighting systems would be another category of ANERT programme. The Agencies empanelled in this process will be eligible for undertaking such work also and price offers will be collected separately through a bidding process based on site specific conditions.

ix. On empanelment, the Empanelled Agency has to provide wide publicity and awareness throughout Kerala regarding the programme.

x. Any complaint or service call from the beneficiary has to be attended within 48 hours and the defective devices have to be repaired and reconditioned within 7 days.

I.E Bid Qualification Requirements

I.E.1. An agreement in Rs.200/- Kerala stamp paper as per the format given in Annexure B must be submitted along with EoI document.

2. Only Original Equipment Manufacturer (OEM) / Authorised Distributor of OEMs are eligible to participate in the process. (Any one or more of the component such as SPV Module, Lithium Battery and LED Luminaire)

3. The bidder shall be either Proprietary/ Limited company/ PSU registered in India with a valid Company Registration Certificate.

4. The OEM shall be in the concerned business for last 3 years in India

5. The Empanelment is mainly based on State wide. Agency should have at least one service centre for two adjacent districts in Kerala if they are intended to do business throughout the State. Name, Address and contact number of the Service Centers are required to be furnished. Detailed list with address, contact details, e mail Id and phone number and proof have to be submitted. If the bidder does not have such facility at the time of submission, an undertaking should be submitted along with Kerala stamp paper worth Rs. 200/- agreeing to set up such facility and intimate the same within 15 days of letter of acceptance. The bidder can also opt for doing business in selected districts also. In such case, the bidder should have service centres in those particular districts.

6. The bidder shall provide warranty for the components being listed as per this document and shall also submit an undertaking on a non-judicial stamp paper of Rs.200/- for providing service support during the entire warranty period.

7. ANERT will conduct factory visits and witness the manufacturing process and tests, if found to be necessary.

8. ANERT reserves the right to delist such of the manufacturers from the Empanelment list in case, the performance of the component/ device is not satisfactory within the guaranty period.

9. The CEO, ANERT reserves the right to add, remove, and modify any of the terms and conditions contained in the empanelment document.

10. Any changes/updates in MNRE guidelines from time to time will be binding on all the stakeholders.

11. The bidders should quote their allowable rate of price for each product / each model State wide inclusive of expenses related to transportation, handling, supply, installation and commissioning and inclusive of applicable taxes. The rate quoted should not exceed the benchmark cost specified for each category. The bidders can also submit the bids in two covers (Technical Bid and Price Bid) with all documents after 1-4-2024 manually binding to all the conditions in the e tender notification. The qualified bidders will be included in the empanelment list subsequently.

12. Power of attorney for the signatory authorized to sign the tender document and future documentation during implementation process has to be submitted along with the EoI. The documents signed by this authority only will be accepted for Expression of Interest and other documents submitted under this project. If the agency desires to change this authority fresh power of attorney has to be submitted.

13. If the Empanelled Agency claims any subsidy/incentive from MNRE/ any other organisation for the projects sanctioned by ANERT the same subsidy amount should be transferred to the beneficiary. An undertaking to this effect has to be submitted with each completion report.

I.E.2. Eligibility Requirement

16.1.1 The detail of eligibility requirements is provided in the table below. The bidders are required to furnish the required supporting documents along with the Technical Bid.

S. No.	Criteria	Documents Required
1.1	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) Firm registered under Partnership Act, 1932 in India; OR c) Sole Proprietor	a) In case of Company – Copy of Registration/ Incorporation Certificate b) In case of Partnership – Copy of Deed of Partnership c) In case of Sole Proprietor – Duly notarized Undertaking from Sole proprietor
1.2	The Bidder must have the required GST Registration	Copy of GST registration certificate with legible GSTIN.
1.3	The Bidder must have valid PAN Number	Copy of Pan Card
1.4	The Bidders shall submit the detailed technical documents on the performance of the systems	Self-declaration and catalogue for the same to be submitted.
1.5	The bidder should be having unblemished record and must not be blacklisted or declared ineligible for corrupt & fraudulent practices by "any State/ Central Government" department/ company / entity" as on date of bid opening.	The bidder shall agree to this condition.

I.E.3. Qualification Requirement

The details of qualification requirements are provided in the table below. The bidders are required to furnish the required supporting documents along with the Technical Bid.

S. No.	Criteria	Documents Required
1.1.	**Technical Criteria**	
	The Successful bidder shall have done Solar Powered Projects like Solar Street Lighting System and Solar Lantern. For Solar Lantern: Bidder must have supplied at least 500 Nos of solar lanterns as on date of submission of bid. Minimum 250 Nos. of Solar Lanterns to be supplied to Government Department/agencies. For Solar Street Lighting System: Bidder must have supplied and installed at least 100 Nos of solar street lighting systems as on date of submission of documents. Out of this, 25% of the total quantity should be supplied and installed in Government department/agencies	Copy of work order and Bills/ Certification from the purchaser regarding the execution of order should be submitted as a proof of executing the supply/ installation.
1.2.	**Financial Criteria**	
1.2.1.	The Bidder should have positive net worth in at least 2 years out of the last three Financial Years (FY20-21, FY21-22 & FY22-23).	1. Certificate fulfilling required financial criteria in the name of Bidder duly certified by Practicing Chartered Accountant as per the format provided Format C, duly mentioning UDIN 2. Firm's Annual Audit Report, Balance
1.2.2.	Minimum Average Annual Turnover (MAAT) during any 2 best out of last	

S. No.	Criteria	Documents Required
	three financial years (FY20-21, FY21-22 & FY22-23) of the bidder shall not be less than rupees one crore.	sheet, Profit & Loss and Income Tax Returns / CA certificate for last three years i.e. (FY20-21, FY21-22 & FY22-23)

I.F Conditions of Contract

I.F.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. ANERT shall invite separate tenders from the short-listed vendors for supply of components for projects directly executed by ANERT.
3. 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 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:
4. 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.
5. 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 registration fee deposited by the bidder for empanelment 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.

6. 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.
7. 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.
8. 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.
9. All payments to the contractors will be made by ANERT/concerned in due course as mentioned in this document.
10. All incidental expenses incurred by ANERT for making payments outside the State in which the claim arises shall be borne by the contractor
11. Payments will be made only after the supply, installation and commissioning of the items and certification by the competent technical personnel of ANERT.

12. 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.
13. 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.
14. 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 of 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.

15. 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.
16. 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.
17. Conditions in the technical document, technical specifications and special conditions of this document would override these general conditions, wherever applicable.
18. 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.

19. 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.
20. 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.
21. During the evaluation, ANERT may seek more clarifications/details from any or all of the bidders, if felt necessary.

I.G TEST SAMPLES FOR EMPANELMENT (Solar Lanterns)

A test sample of solar lantern (for all models) to be submitted in ANERT Headquarter along with e tender submission for evaluation. The samples will be returned to the vendors on finalisation of the empanelment process.

I.H TECHNICAL SPECIFICATIONS

1. The system installed should conform to the minimum technical requirements by ANERT as indicated below.
2. All the components of the system should comply with the minimum technical requirements specified. Technical compliance certificate/ Test report from the approved laboratory of MNRE, NABL, IEC accredited Test Centers has to be submitted for the components of all the models and brands proposed. The certificate should be valid as on the date of submission of bid.
3. The Agency should have completed the installation of at least an aggregated minimum capacity as per the experience criteria for each category of empanelment. The list of installed systems should be provided in the enclosed format (Annexure -C, Annexure-D) along with copies of work order and bill / installation/ supply certificate issued by the user.

I.H.1 SOLAR LANTERN

There are two models of LED based Solar Lanterns with the following minimum rated parameters.

1. Solar Lantern Model A

LED	4 W , 600 lumen
Solar PV Module (Poly/Mono Crystalline Silicon)	10 Wp
Battery (Lithium Ferro Phosphate)	12.8 V, 6 Ah (76.8 Wh)
Autonomy of operation	12 hours

2. **Solar Lantern Model B**

LED	6 W , 900 lumen
Solar PV Module (Poly/Mono Crystalline Silicon)	12 Wp
Battery (Lithium Ferro Phosphate)	12.8 V, 6 Ah (76.8 Wh)
Autonomy of operation	9 hours

A Solar Lantern is a portable lighting device consisting of a PV module, battery, LED lamp, and electronics. Battery, lamp, optics and electronics are placed in a suitable housing, made of metal or plastic or fiber glass. The Solar Lantern is suitable for covering a full range of 360 degrees lumen output.

PV module converts sun light into electricity, charges the battery which powers the luminaire. Luminaire consists of White Light Emitting Diode (W-LED), a solid-state device which emits light when an electric current passes through it.

White LED of 150 lumen/watt efficacy (as per LM- 80 certificate), top mounted LED facing down, dispersed beam, soothing to eyes without dark patches with the use of proper dome shaped reflector are the features of the lantern. Optical diffuser should not be used for reducing luminous intensity.

Facility for mobile phone charging: USB port for mobile charging to be provided. Duty cycle for lighting will be adjusted accordingly.

I.H.2 PV MODULE

(i) Indigenously manufactured PV modules should be used in the solar lantern.

(ii) **The PV module should have crystalline silicon solar cells, and should have a test certificate conforming to IEC 61215** Edition II / BIS 14286 from an NABL or IECQ accredited Laboratory. In case the certificate for the offered module is not available, a test certificate for higher capacity module of same make and series produced by the same PV module manufacturer should be available. Test certificate should be submitted with tender.

(iii) The PV module must have a minimum of 10 / 12Wp at a load voltage* of 16.40 V under the standard test conditions (STC) of measurement.

(iv) The open circuit voltage* of the PV modules under STC should be at least 21.0 Volts.

(v) The module efficiency should be above 14%**.**

(vi) The terminal box on the module should have a provision of opening it for replacing the cable, if required.

(vii) There should preferably be an arrangement (stand) for mounting the module at an optimum angle in the direction facing the sun.

(viii) A foil/ strip containing the following details should be fixed inside the module so as to be clearly visible from the front side: -

a) Name of the Manufacturer and/ or distinctive Logo

b) Model and/ or Type No.

c) Serial No.

d) Year of manufacture

(ix) The cable connecting module to the lantern should be good quality 2 core, 1 sq. mm double sheathed copper cable suitable for outdoor use and having a length of minimum 12 meters.

**The load and open circuit voltage conditions of the PV module are not applicable for the system having MPPT.*

I.H.3 BATTERY

(i) Minimum 76.8 Wh capacity), Lithium Ferro Phosphate battery **(IEC 62133 or BIS test certificate should be submitted with the document)**

I.H.4 LIGHT SOURCE

i. The light source will be of White Light Emitting Diode (W-LED) type, minimum luminous efficacy 150 Lumen/watt.

ii. The colour temperature of W-LED(s) used in the system should be in the range of 5000^{o}K –6500^{o}K.

iii. W-LED(s) should not emit ultra violet light.

iv. The light output from the W - LED should be constant throughout the duty cycle.

v. LM 80 test certificate of the LED should be submitted with the document.

vi. Test certificate of the solar lantern issued from laboratories authorised by MNRE / NABL / IEC to be provided along with submission of bid for compliance of the electrical/ electronic parameters. The test certificate should clearly indicate the make and model of the test sample of solar lantern and the make and model number of the LED used in the lantern.

I.H.5 ELECTRONICS

(i) Efficiency of the electronic system should be at least 85%.

(ii) Electronics should have temperature compensation for proper charging of the battery throughout the year.

(iii) The idle current should be less than 1 mA

(iv) The PCB containing the electronics should be capable of solder free installation and replacement.

(v) Necessary switches suitable for DC use and other protections should be provided.

(vi) The system should have a USB port for mobile phone charging facility.

(vii) A dual sheathed 2 core copper cable of 1 sq.mm and minimum length of 12 metre should be provided for inter-connection between the module and the lantern.

I.H.6 ELECTRONIC PROTECTIONS

(i) Adequate protection is to be incorporated for "No Load" condition, e.g. when the lamp is removed and the lantern is switched ON.

(ii) The system should have protection against battery overcharge and deep discharge conditions.

(iii) The load reconnect should be provided at around 70% of the battery capacity status.

(iv) Adequate protection should be provided against battery reverse polarity.

(v) A fuse should be provided to protect against short circuit conditions.

(vi) Protection for avoiding reverse flow of current through the PV module should be provided.

(vii) During the charging, lamp cannot be Switched "ON".

I.H.7 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.H.8 QUALITY AND WARRANTY

(i) The solar lantern unit with W-LED including battery will be warranted for five years. The PV module should be warranted for 10 years.

(ii) The Warranty/ Guarantee Card to be supplied with the Solar Lantern must contain the details of the system supplied.

I.H.9 OTHER FEATURES

An Operation, Instruction and Maintenance Manual, in English and Malayalam, should be provided with the Solar Lantern. The following minimum details must be provided in the Manual:

a. Basic principles of photo voltaics.
b. A small write-up (with a block diagram) on Solar Lanterns - its components, PV module, battery, electronics and luminaire and expected performance.
c. Significance of indicators.
d. Type, Model number, Voltage, capacity of the battery, used in the system.
e. The make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of W -LEDs used in the lighting system.
f. Clear instructions on mounting, operation, regular maintenance and trouble shooting of the Solar Lantern.
g. Instructions on replacement of battery.
h. DO's and DONT's.
i. Name and address of the contact person for repair and maintenance during the warranty.

I.H.10 Solar Street Lighting / Flood Lighting Systems

A standalone 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.

There are fourteen models of LED based solar street lighting / Flood lighting systems with the following minimum rated parameters.

1. Solar Street Lighting System Model A (Nonintegrated without dimming)

LED Luminaire	14 W , 2100 lumen
Solar PV Module (Poly/Mono Crystalline Silicon)	60 Wp
Battery (Lithium Ferro Phosphate)	384 Wh
G.I Pole Height -5m above ground level, Dia -10 cm	
Autonomy of operation	24 hours

5 metre hot dip galvanized pole with dia. 10 cm made of 3mm sheet thickness, base plate of size not less than 200 x200x12mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 500x500mm and 800mm under soil and 200 mm above ground level along with required reinforcement as required.

2. Solar Street Lighting System Model B (Integrated with 50% dimming for 4 hours)

LED Luminaire	16 W , 2500 lumen
Solar Module (Poly/Mono Crystalline Silicon)	60 Wp
Battery (Lithium Ferro Phosphate)	384 Wh
G.I Octagonal Pole Height -5m above ground level, Dia - 10 cm	
Autonomy of operation	24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 5 metre hot dip galvanized octagonal pole with dia. 10 cm made of 3mm sheet thickness, base plate of size not less than 200 x200x12mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 500x500mm and 800mm under soil and 200 mm above ground level along with required reinforcement as required.

3. Solar Street Lighting System Model C (Nonintegrated without dimming)

LED Luminaire	20W , 3000 lumen
Solar Module (Poly/Mono Crystalline Silicon)	100Wp
Battery (Lithium Ferro Phosphate)	538 Wh
G.I Pole Height -6m above ground level, Dia - 10 cm	
Autonomy of operation	24 hours

6 metre hot dip galvanized pole with dia. 10 cm made of 3mm sheet thickness, base plate of size not less than 220 x220x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 500x500mm and 800mm under soil and 200 mm above ground level along with required reinforcement as required

4. Solar Street Lighting System Model D (Non integrated with 50% dimming for 4 hours)

LED Luminaire	25 W , 3700 lumen
Solar Module (Poly/Mono Crystalline Silicon)	100 Wp
Battery (Lithium Ferro Phosphate)	538 Wh
G.I Pole	Height -6m above ground level, Dia - 10 cm
Autonomy of operation	24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 6 metre hot dip galvanized pole with dia. 10 cm made of 3mm sheet thickness, base plate of size not less than 220 x220x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 500x500mm and 800mm under soil and 200 mm above ground level along with required reinforcement as required.

5. Solar Street Lighting System Model E (Non integrated with 50% dimming for 5 hours)

LED Luminaire	35W , 5200 lumen
Solar Module (Poly/Mono Crystalline Silicon)	120Wp
Battery (Lithium Ferro Phosphate)	768 Wh
G.I Pole	Height -6m above ground level, Dia - 10 cm
Autonomy of operation	24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 6 metre hot dip galvanized pole with dia. 10 cm made of 3mm sheet thickness, base plate of size not less than 220 x220x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with

M25 grade concrete in 500x500mm and 800mm under soil and 200 mm above ground level along with required reinforcement as required.

6. Solar Street Lighting System Model F (Non integrated with 50% dimming for 4 hours)

LED Luminaire	50W , 7500 lumen
Solar Module (Poly/Mono Crystalline Silicon)	150Wp
Battery (Lithium Ferro Phosphate)	1152 Wh
G.I Pole	Height -6m above ground level, Dia - 10 cm
Autonomy of operation	24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 6 metre hot dip galvanized pole with dia. 10 cm made of 3mm sheet thickness, base plate of size not less than 220 x220x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 500x500mm and 800mm under soil and 200 mm above ground level along with required reinforcement as required.

7. Solar Street Lighting System Model G (Non integrated with 50% dimming for 4 hours)

LED Luminaire	70W , 10400 lumen
Solar Module (Poly/Mono Crystalline Silicon)	200Wp
Battery (Lithium Ferro Phosphate)	1728 Wh
G.I Mast	Height -7m above ground level, Octagonal
Autonomy of operation	24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 7 metre hot dip galvanized octagonal pole with top 70 mm and bottom 155 mm dia. made of 3mm sheet thickness, base plate of size not less than 275 x275x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 500x500mm and 1000mm under soil and 200 mm above ground level along with required reinforcement as required. The entire structure should withstand wind velocity of 150 km/hour.

8. Solar Street Lighting System Model H (Non integrated without dimming)

LED Luminaire	80W , 12000 lumen
Solar Module (Poly/Mono Crystalline Silicon)	250Wp
Battery (Lithium Ferro Phosphate)	2150 Wh
G.I Mast	Height -7m above ground level, Octagonal
Autonomy of operation	24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 7 metre hot dip galvanized octagonal pole with top 70 mm and bottom 175 mm dia. made of 3mm sheet thickness, base plate of size not less than 275 x275x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 500x500mm and 1000mm under soil and 200 mm above ground level along with required reinforcement as required. The entire structure should withstand wind velocity of 150 km/hour.

9. Mini Mast Solar Street Lighting System Model I (Non integrated with 50% dimming for 4 hours)

LED Luminaire	35W , 5200 lumen x 3 Nos
Solar Module (Poly/Mono Crystalline Silicon)	120Wp x 3 Nos
Battery (Lithium Ferro Phosphate)	768 Wh x 3 Nos
G.I Mast	Height -7m above ground level, Octagonal with ring arm bracket for holding the luminaires.
Autonomy of operation	24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 7 metre hot dip galvanized octagonal pole with top 70 mm and bottom 175 mm dia. made of 3mm sheet thickness, base plate of size not less than 275 x275x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 500x500mm and 1000mm under soil and 200 mm above ground level along with required

reinforcement as required. The entire structure should withstand wind velocity of 150 km/hour.

10. Mini Mast Solar Street Lighting System Model J (Non integrated with 50% dimming for 4 hours)

LED Luminaire	50W , 7500 lumen x 3 Nos
Solar Module (Poly/Mono Crystalline Silicon)	150Wp x 3 Nos
Battery (Lithium Ferro Phosphate)	1152 Wh x 3 Nos
G.I Mast	Height -7m above ground level, Octagonal with ring arm bracket for holding the luminaires.
Autonomy of operation	24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 7 metre hot dip galvanized octagonal pole with top 70 mm and bottom 175 mm dia. made of 3mm sheet thickness, base plate of size not less than 275 x275x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 500x500mm and 1000mm under soil and 200 mm above ground level along with required reinforcement as required. The entire structure should withstand wind velocity of 150 km/hour.

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

LED Luminaire	50W , 7500 lumen x 4 Nos
Solar Module (Poly/Mono Crystalline Silicon)	150Wp x 4 Nos
Battery (Lithium Ferro Phosphate)	1152 Wh x 4 Nos
G.I Mast	Height -7m above ground level, Octagonal with ring arm bracket for holding the luminaires.
Autonomy of operation	24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 7 metre hot dip galvanized octagonal pole with top 70 mm and bottom 175 mm dia. made of 3mm sheet thickness, base plate of size not less than 275 x275x16mm, single arm bracket, foundation bolts and all accessories included.

Foundation casting should be with M25 grade concrete in 600x600mm and 1200mm under soil and 200 mm above ground level along with required reinforcement as required. The entire structure should withstand wind velocity of 150 km/hour.

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

LED Luminaire	70W , 10400 lumen x3 Nos
Solar Module (Poly/Mono Crystalline Silicon)	200Wp x3 Nos
Battery (Lithium Ferro Phosphate)	1728 Wh x 3 Nos

G.I Pole Height -8m above ground level, Octagonal with ring arm bracket for holding the luminaires.

Autonomy of operation 24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 7 metre hot dip galvanized octagonal pole with top 70 mm and bottom 175 mm dia. made of 3mm sheet thickness, base plate of size not less than 275 x275x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 600x600mm and 1200mm under soil and 200 mm above ground level along with required reinforcement as required. The entire structure should withstand wind velocity of 150 km/hour.

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

LED Luminaire	70W , 10400 lumen x4 Nos
Solar Module (Poly/Mono Crystalline Silicon)	200Wp x4 Nos
Battery (Lithium Ferro Phosphate)	1728 Wh x 4 Nos

G.I Pole Height -8m above ground level, Octagonal with ring arm bracket for holding the luminaires.

Autonomy of operation 24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 7 metre hot dip galvanized octagonal pole with top 70 mm and bottom

175 mm dia. made of 3mm sheet thickness, base plate of size not less than 275 x275x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 600x600mm and 1200mm under soil and 200 mm above ground level along with required reinforcement as required. The entire structure should withstand wind velocity of 150 km/hour.

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

LED Luminaire	80W , 12000 lumen x4 Nos
Solar Module (Poly/Mono Crystalline Silicon)	250Wp x4 Nos
Battery (Lithium Ferro Phosphate)	2150 Wh x 4 Nos

G.I Pole Height -8m above ground level, Octagonal with ring arm bracket for holding the luminaires.

Autonomy of operation 24 hours

The housing of the luminaire should be of pressure diecast aluminium with 500 hours salt spray tested finish and the transparent cover should be of poly carbonate. 7 metre hot dip galvanized octagonal pole with top 70 mm and bottom 175 mm dia. made of 3mm sheet thickness, base plate of size not less than 275 x275x16mm, single arm bracket, foundation bolts and all accessories included. Foundation casting should be with M25 grade concrete in 600x600mm and 1200mm under soil and 200 mm above ground level along with required reinforcement as required. The entire structure should withstand wind velocity of 150 km/hour.

I.H.11 DUTY CYCLE

The W-LED solar street lighting system should be designed to operate from dusk to dawn, under average daily insolation of 5 kWh /sq.m on a horizontal surface.

I.H.12 LUMINAIRE

The light source will be a white LED type. The colour temperature of white LED used in the system should be in the range of 5000°K–6500°K. Use of LEDs which emits ultraviolet light is not permitted.

The minimum luminous efficacy of the white LED should be 160 lumen/watt and that of the luminaire should be 150 lumen/watt

The light output from the white LED light source should be constant throughout the duty cycle.

The lamps should be housed in an assembly suitable for outdoor use. The temperature of heat sink should not increase more than 20°C above ambient temperature during the dusk to dawn operation.

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 luminary should be with **IP66** protection.

I.H.13 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.H.14 PV MODULE

- The PV module(s) should be indigenously manufactured and contain crystalline silicon cells. It is required to have certificate for the supplied PV module as per IEC 61215, IEC 61730 and IEC 61701 specifications or equivalent BIS specifications. Or the SPV modules offered should be enlisted under latest ALMM (Approved List of Models and Manufacturers) order of MNRE. Copy of the ALMM list to be provided.
- 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.H.15 ELECTRONICS, INCLUDING PROTECTIONS

- The total electronic efficiency should be at least 85%.
- Electronics should operate at 12 V/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 in corporate with MPPT/PWM.
- 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 70% of the battery capacity status.
- Necessary lengths of wires / cables and appropriate fuses should be provided.

I.H.16 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 lumen of desired level over the specified area.

A Hot Dip Galvanised Iron /ABS/Aluminium box (IP66 protection) of suitable structure to be fixed on the pole for housing the storage battery .

All mechanical metallic parts shall be of aluminium/ hot dip galvanised iron 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.

I.H.17 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.H.18 OTHER FEATURES

There will be a Display Board of size 60mm X 30mm on the pole. The material of the board shall be stainless steel / G.I of minimum gauge 20 and the following details are to be displayed.

a) Name of the scheme.

b) Description of item

c) Date of installation.

d) Name of ANERT and its logo.

There should be a name plate in addition to the Display Board in which the name of the Empanelled Agency and phone number for service are clearly visible.

I.H.19 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, luminaire, pole and other components 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.H.20 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.

I.H.21 Test Reports/ Compliance Certificates Required for Solar LED Street Lighting systems

- Solar module must have IEC 61215, IEC 61730 & IEC 61701 test certificates or equivalent BIS standard. Copy of the test certificate should be attached with the tender document (for the quoted model of module). Or the SPV modules offered should be enlisted under latest ALMM (Approved List of Models and Manufacturers) order of MNRE. Copy of the ALMM list to be provided.
- Lithium ferro phosphate battery must have 5 year warranty. Copy of certificate of IEC 62133/equivalent BIS standard should be provided with the tender document.
- Light unit must have IESNA LM 80 report for LED and LM 79 report for luminaire. Copy of the report should be attached with the tender document.
- Compliance certificate for the enclosure of luminary should be with **IP66** protection.
- **The test certificate of the solar SLS issued from laboratories authorised by MNRE / NABL / IEC to be provided along with submission of bid for compliance of the electrical/ electronic parameters. The test certificate of luminaire should clearly indicate the make and model of the test sample of solar SLS and the make and model number of the LED used in the luminaire.**

I.I BENCH MARK PRICE

BENCH MARK PRICE OF SOLAR LANTERNS AND SOLAR STREET LIGHTING / FLOOD LIGHTING SYSTEMS

Solar Lantern

	LED Capacity	Module Capacity	Benchmark Price inclusive of GST (12%) (Rs)
Model –A	4 W	10 W	3800/-
Model - B	6 W	12 W	4100/-

Solar LED Street / Flood Lighting System

	LED Capacity	**Module Capacity**	**Benchmark Price inclusive of GST (13.8%) (Rs)**
Model –A	14 W, 2100 Lumen	60 W_P	45,500
Model – B	16 W, 2500 Lumen	60 W_P	68,000
Model –C	20 W, 3000 Lumen	100 W_P	55,700
Model - D	25 W, 3700 Lumen	100 W_P	61,500
Model –E	35 W, 5200 Lumen	120 W_P	76,000
Model – F	50 W, 7500 Lumen	150 W_P	99,000
Model –G	70 W, 10400 Lumen	200 W_P	1,36,000
Model - H	80 W, 12000 Lumen	250 W_P	1,65,000
Model – I	35Wx3 , 5200 Lumen x3	120 W_P x3	2,41,000
Model – J	50Wx3 , 7500 Lumen x3	150 W_P x3	3,16,000
Model – K	50Wx4 , 7500 Lumen x4	150 W_P x4	4,10,000
Model - L	70Wx3 , 10400 Lumen x3	200 W_P x3	4,98,000
Model – M	70Wx4 , 10400 Lumen x4	200 W_P x4	6,37,000
Model - N	80Wx4 , 12000 Lumen x4	250 W_P x4	6,70,000

The bidders should quote their allowable rate of price for each product / each model State wide inclusive of expenses related to transportation, handling, supply, installation and commissioning and inclusive of applicable taxes. The rate quoted should not exceed the benchmark cost specified for each category. The bidders can also submit the bids in two covers (Technical Bid and Price Bid) with all documents after 1-2-2024 manually binding to all the conditions in the e tender notification. The qualified bidders will be included in the empanelment list subsequently.

I.J ANNEXURES

ANNEXURE A

Format for Covering Letter

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

Sir,

I/We hereby 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 against each item for the supply/installation of Solar Powered Devices (below 1kWp) in Kerala. The work allotted to me/us will be completed within the time frame as per the work order from the beneficiary/ Government/any other agency.

I am/we are remitting herewith the required amount of Rs. 50000/- as registration fee by electronic payment vide transaction No. ……dt:……..

Yours faithfully,

Place: Signature:

Date: Name:

Designation:

(Office Seal)

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 for two districts. List 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.
9. The rate of solar devices quoted in LSG institutions, Government departments and other beneficiaries will not exceed the approved empanelment rate of ANERT.
10. All the above terms and conditions are acceptable to me/us.

Date:

Signature of the authorised signatory:

Name:

Designation:

(Office Seal)

Annexure -C

Details of Solar Lanterns Supplied

Sl. No.	Rating of lantern and PV module	Name & address of beneficiary	Mobile/ Land Phone No.	Email ID	Total No of systems supplied

It is certified that the details furnished above are true and correct to my knowledge and belief and all the systems are installed / supplied by our agency.

Date

Signature of the authorised signatory:

Name:

Designation:

(Office Seal)

Annexure -D

Details of Solar LED Street Lighting Systems Installed

Sl. No.	Rating of Luminaire and PV module installed	Name and Address of beneficiary	Mobile/ Land Phone No.	Email ID	Nos. of systems installed
				Total	

It is certified that the details furnished above are true and correct to my knowledge and belief and all the systems are installed by our agency.

Date

Signature of the authorized signatory:

Name:

Designation:

(Office Seal)

Annexure –E

Details of Service Centers

Sl. No.	District	Address of Service Centre	Own/ others	If other- mode of appointment	Contact person	Contact No./ Email ID	Copy of agreement/MOU Enclosed/Not enclosed

It is certified that the details furnished above are true and correct to my knowledge and belief and all the systems are installed by our agency.

Date

Signature of the authorised signatory:

Name:

Designation:

(Office Seal)

Annexure F –Declaration by the Bidder

e-Tender Notification No: ....., dtd …….. for Invitation of Expression of Interest (EoI) for Empanelment of Agencies for supply and installation of solar powered devices (below 1kW) in Kerala under Distributed Power Generation (Off Grid) Programme

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. Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers for any part of the Contract, has not been declared ineligible by the ANERT or Government of Kerala;
7. 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.
8. Our firm has obtained the certifications/ authorisation from MNRE or any other Ministry or Govt. Institution to prove competency to participate in the tender.
9. We declare that our firm is not currently black listed by MNRE or any other State Govt. agencies.

Signature

Date

Name

Seal

Annexure G – Declaration of Relationship with ANERT Employee

(to be signed and submitted by the bidder along with the bid)

Tender Notification No.: ……..

Invitation of Expression of Interest (EoI) for Empanelment of Agencies for supply and installation of solar powered devices (below 1kW) in Kerala under Distributed Power Generation (Off Grid) Programme

To

The CEO

ANERT

Name of the ANERT employee with Designation:

Name of the bidder related to the employee:

This is to put on record that Shri/Smt …….. currently working as …….. in ANERT is related to ……., who is the bidder in the bid. We are aware of the Anti-corruption policy of ANERT and will observe the highest standards during the procurement and the execution of contract and shall retain from corrupt, fraudulent, collusive or coercive practices on competing for the contract.

Signature

Name

Date

ANNEXURE -H – Technical Bid Submission

For Solar Powered Devices (below 1kW)

(To be submitted by all agencies)

1.	Name of the bidder as in registration certificate (Copy of registration certificate to be enclosed)			Page no. in the offer document
2.	Address in full			Page no. in the offer document
3.	Contact Details	Mobile Phone		
		Land Phone		
		Fax No		
		Email		
4.	Name and designation of the authorized signatory (Power of attorney to be enclosed)			Page no. in the offer document
5.	GST Registration No.			
6.	Agreement submitted (Yes/No)			
7.	Service centers in Kerala (There should be at least one service centre for two districts.) or Undertaking in			Page no. in the offer document

	stamp paper worth Rs.200/- to be submitted			

Signature of the authorised signatory:

Name:

Designation:

Date

(Office Seal)

ANNEXURE - I - Details of System Components for Solar Powered Devices.

1 Solar Lantern (Model A and Model B)

(Test certificate should be submitted as per ANERT specification)

1.1	**Solar Module**					
			IEC61215/ IS 14286	IEC61730	IEC61701	
1.1.1	Option-1	**1. Make**				Page no. in the offer Document
		2.Model No				
		3.Wattage				
		4.Test Certificate No.				
		5.Name of testing agency				
		6.Validity Up To				
			IEC61215/ IS 14286	IEC61730	IEC61701	
1.1.2	Option-2	**1. Make**				Page no. in the offer document
		2.Model No				
		3.Wattage				
		4.Test Certificate No.				
		5.Name of testing agency				
		6.Validity Up To				
			IEC61215/ IS14286	IEC61730	IEC61701	

1.2	**Solar LED Lantern**					
			LED	Battery	Luminaire	
1.2.1	Option -1	**1. Make**				Page no. in the offer document
		2.Model No				
		3.Capacity				
		4. Test Certificate No.				
		5.Name of testing agency				
		6.Validity Up To				
			LED	Battery	Luminaire	
1.2.2	Option -2	**1. Make**				Page no. in the offer document
		2.Model No				
		3.Capacity				
		4. Test Certificate No.				
		5.Name of testing agency				
		6.Validity Up To				

I have read the technical requirements; warranty conditions and the details furnished above are true, correct and complete to my knowledge and belief. All the details furnished are supported by documentary evidence.

Date

Signature of the authorised signatory:

Name:

Designation:

(Office Seal)

NOTE: If any more makes and models of system components are proposed, extra pages may be used.

I.2 Solar LED Street Lighting Systems

1. Solar LED Street Lighting System (Model -A)

1.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
1.1.1	Option-1	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701
1.1.2	Option-2	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
1.2	**Battery**				
			IEC 62133		
1.2.1	Option -1	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		

1.2.2	Option -2	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
1.3	**Luminaire**		LM 79	LM 80
1.3.1	Option -1	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
1.3.2	Option -2	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

2. Solar LED Street Lighting System (Model B)

2.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
2.1.1	Option-1	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing			

		agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701
2.1.2	Option-2	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
2.2	**Battery**				
			IEC 62133		
2.2.1	Option -1	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
2.2.2	Option -2	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			

		6.Validity Up To		
2.3 Luminaire			LM 79	LM 80
2.3.1	Option -1	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
2.3.2	Option -2	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

3. Solar LED Street Lighting System (Model C)

3.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
3.1.1	Option-1	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701

3.1.2	Option-2	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
3.2	**Battery**				
			IEC 62133		
3.2.1	Option -1	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
3.2.2	Option -2	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
3.3 Luminaire			LM 79	LM 80	
3.3.1	Option -1	1. Make			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			LM 79	LM 80	
3.3.2	Option -2	1. Make			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			

4. Solar LED Street Lighting System (Model D)

4.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
4.1.1	Option-1	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701
4.1.2	Option-2	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/ IS14286	IEC61730	IEC61701
4.1.3	Option-3	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
4.2	**Battery**				
			IEC 62133		
4.2.1	Option -1	1. Make			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			

			IEC 62133	
4.2.2	Option -2	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			IEC 62133	
4.2.3	Option -3	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
4.3 Luminaire			LM 79	LM 80
4.3.1	Option -1	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
4.3.2	Option -2	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
4.3.3	Option -3	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

5. Solar LED Street Lighting System (Model -E)

5.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
5.1.1	Option-1	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701
5.1.2	Option-2	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up o			
5.2	**Battery**				
			IEC 62133		
5.2.1	Option -1	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
5.2.2	Option -2	**1. Make**			

		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
5.3 Luminaire			LM 79	LM 80
5.3.1	Option -1	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
5.3.2	Option -2	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

6. Solar LED Street Lighting System (Model F)

6.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
6.1.1	Option-1	**1. Make**			
		2.Model No			
		3.Wattage			

		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701
6.1.2	Option-2	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
6.2	**Battery**				
			IEC 62133		
6.2.1	Option -1	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
6.2.2	Option -2	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
6.3 Luminaire			LM 79	LM 80	
6.3.1	Option -1	**1. Make**			

		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
6.3.2	Option -2	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

7. Solar LED Street Lighting System (Model -G)

7.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
7.1.1	Option-1	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701
7.1.2	Option-2	**1. Make**			
		2.Model No			
		3.Wattage			

		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
7.2	**Battery**				
			IEC 62133		
7.2.1	Option - 1	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
7.2.2	Option - 2	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
7**.3 Luminaire**			LM 79	LM 80	
7.3.1	Option -1	1. Make			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			LM 79	LM 80	

7.3.2	Option -2	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

8. Solar LED Street Lighting System (Model H)

8.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
8.1.1	Option-1	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701
8.1.2	Option-2	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/ IS14286	IEC61730	IEC61701
8.1.3	Option-3	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			

8.2	**Battery**			
			IEC 62133	
8.2.1	Option -1	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			IEC 62133	
8.2.2	Option -2	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			IEC 62133	
8.2.3	Option -3	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
8.3 Luminaire			LM 79	LM 80
8.3.1	Option -1	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
8.3.2	Option -2	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		

		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
8.3.3	Option -3	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

9. Solar LED Street Lighting System (Model -I)

9.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
9.1.1	Option-1	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701
9.1.2	Option-2	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
9.2	**Battery**				
			IEC 62133		
9.2.1	Option -1	**1. Make**			
		2.Model No			
		3.Capacity			

		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			IEC 62133	
9.2.2	Option -2	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
9.3 Luminaire			LM 79	LM 80
9.3.1	Option -1	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
9.3.2	Option -2	**1. Make**		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

10. Solar LED Street Lighting System (Model J)

10.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
10.1.1	Option-1	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			

			IEC61215/IS 14286	IEC61730	IEC61701
10.1.2	Option-2	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
10.2	**Battery**				
			IEC 62133		
10.2.1	Option -1	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
10.2.2	Option -2	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
10.3 Luminaire			LM 79	LM 80	
10.3.1	Option -1	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			LM 79	LM 80	
10.3.2	Option -2	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			

		6.Validity Up To			

11. Solar LED Street Lighting System (Model K)

11.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
11.1.1	Option-1	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701
11.1.2	Option-2	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
11.2	**Battery**				
			IEC 62133		
11.2.1	Option -1	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
11.2.2	Option -2	**1. Make**			

		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
11.**3 Luminaire**			LM 79	LM 80
11.3.1	Option -1	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
11.3.2	Option -2	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

12. Solar LED Street Lighting System (Model L)

12.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
12.1.1	Option-1	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701

12.1.2	Option-2	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/ IS14286	IEC61730	IEC61701
12.1.3	Option-3	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
12.2	**Battery**				
			IEC 62133		
12.2.1	Option -1	1. Make			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
12.2.2	Option -2	1. Make			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
12.2.3	Option -3	1. Make			
		2.Model No			
		3.Capacity			

		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
12.3 Luminaire			LM 79	LM 80
12.3.1	Option -1	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
12.3.2	Option -2	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
12.3.3	Option -3	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

13. Solar LED Street Lighting System (Model M)

13.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
13.1.1	Option-1	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up			

		To			
			IEC61215/IS 14286	IEC61730	IEC61701
13.1.2	Option-2	**1. Make**			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
13.2	**Battery**				
			IEC 62133		
13.2.1	Option -1	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
13.2.2	Option -2	**1. Make**			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
13.**3 Luminaire**			LM 79	LM 80	
13.3.1	Option -1	1. Make			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			

			LM 79	LM 80
13.3.2	Option -2	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

14. Solar LED Street Lighting System (Model N)

14.1	**Solar Module**				
			IEC61215/IS 14286	IEC61730	IEC61701
14.1.1	Option-1	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/IS 14286	IEC61730	IEC61701
14.1.2	Option-2	1. Make			
		2.Model No			
		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC61215/ IS14286	IEC61730	IEC61701
14.1.3	Option-3	1. Make			
		2.Model No			

		3.Wattage			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
14.2	**Battery**				
			IEC 62133		
14.2.1	Option -1	1. Make			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
14.2.2	Option -2	1. Make			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
			IEC 62133		
14.2.3	Option -3	1. Make			
		2.Model No			
		3.Capacity			
		4.Test Certificate No.			
		5.Name of testing agency			
		6.Validity Up To			
14.3 Luminaire			LM 79	LM 80	
14.3.1	Option -1	1. Make			
		2.Model No			
		3.Capacity			

		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
14.3.2	Option -2	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		
			LM 79	LM 80
14.3.3	Option -3	1. Make		
		2.Model No		
		3.Capacity		
		4.Test Certificate No.		
		5.Name of testing agency		
		6.Validity Up To		

Invitation of Expression of Interest (EoI) for Empanelment of Agencies for Supply and Installation of Solar Powered Devices (below 1kW) in Kerala under Distributed Power Generation Programme. (Off Grid)

PRICE SCHEDULE

Notification No. ANERT-TECH/252/2023-T3

Dated 8.11.2023

PART-II

Submitted by (Name and address of bidder)	:

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

B1- Price Schedule for Solar Lantern

1. Name of the Agency :

2. Address in Full :

Solar Lantern

Model No	Price/ Unit all-inclusive in Rupees	
	In digits	In words
Model A		
Model B		

1. The price quoted by the bidder for solar lantern shall be inclusive of cost of, transportation, handling, and supply of a standard item and cost of insurance, taxes if any and including warranty etc.

2. The price quoted is applicable for any location in all districts of Kerala.

Date: Signature of the authorised signatory:

Name:

Designation:

(Office Seal)

B2- Price Schedule for Solar Street Lighting / Flood Lighting System

1. Name of the Agency :

2. Address in Full :

Model	Capacity of Module	Price/ Unit all-inclusive in Rupees	
		In digits	In words
Model A	**60 W**		
Model B	**60 W**		
Model C	**100 W**		
Model D	**100 W**		
Model E	**120 W**		
Model F	**150 W**		
Model G	**200 W**		
Model H	**250 W**		
Model I	**360 W**		
Model J	**450 W**		

Model K	**600 W**		
Model L	**600 W**		
Model M	**800 W**		
Model N	**1000 W**		

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

2. The price quoted is applicable for any location in all fourteen districts of Kerala.

Date:

Signature of the authorised signatory:

Name:

Designation:

(Office Seal)