

Kerala

Tenders

#### eTendering System Government of Kerala

#### **Tender Details**

Date : 24-May-2024 05:35 PM

- -IDK/8/2024-DE (IDK) ANERT_673378_1					🖨 Pi
-IDK/8/2024-DE (IDK)					
-IDK/8/2024-DE (IDK)					
ANERT_673378_1					
	Withc	Irawal Allowed	Y	′es	
Fender	Form	of contract	E	PC Contract	
	No. of	f Covers	1		
			uation	lo	
	Is Mu BOQ	Iti Currency Allowe	d For	lo	
	Allow	Two Stage Bidding	I N	lo	
		Details, No. Of C	overs - 1	L	
	Cover No	Cover		Document Type	Descriptio
	1	Fee/PreQual/Technic	al/Finance	.pdf	Technical B
l				.xls	Financial B
Fee in ₹ * - 519]	E	MD Fee Details			
Fee Payable At Nii		MD Amount in ₹	5,500	EMD Exemptio Allowed	n Yes
		MD Fee Type	fixed	EMD Percentag	ae NA
		Item\   Allow   Is Mu   BOQ   Allow   Second   Cover   Cover   Cover   Cover   Cover   No   1   Fee in ₹ * - 519]   Fee Payable At	ItemWise Technical Eval   Allowed   Is Multi Currency Allowe   BOQ   Allow Two Stage Bidding   Cover Details, No. Of C   Cover No   1   Fee in ₹ * - 519]   EMD Fee Details   EMD Amount in ₹	ItemWise Technical Evaluation Allowed N   Is Multi Currency Allowed For BOQ N   Allow Two Stage Bidding N   Cover Details, No. Of Covers - 1 Cover No   Cover No Cover   1 Fee/PreQual/Technical/Finance   Fee in ₹ * - 519] EMD Fee Details   Fee Payable At Nil	ItemWise Technical Evaluation Allowed No   Is Multi Currency Allowed For BOQ No   Allow Two Stage Bidding No   Cover Details, No. Of Covers - 1 No   Cover No Cover Document Type   1 Fee/PreQual/Technical/Finance .pdf   .xls .xls .xls   Fee in ₹ * - 519] EMD Fee Details EMD Exemptio   Fee Payable At Nil S,500 EMD Exemptio

Tender Value in ₹	NA	Product Category	Solar Street Lights	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	45	Period Of Work(Days)	30
Location	Udumbanoor Grama Panchayath, Idukki.	Pincode	685595	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	23-May-2024 04:30 PM	Bid Opening Date	31-May-2024 04:00 PM	
Document Download / Sale Start Date	23-May-2024 04:30 PM	Document Download / Sale End Date	31-May-2024 03:00 PM	
Clarification Start Date	NA	Clarification End Date	NA	
Bid Submission Start Date	23-May-2024 04:30 PM	Bid Submission End Date	31-May-2024 03:00 PM	

# Tender Documents

NIT Document

					(in KB)
	1	Tendernotice_1.pdf	NIT and Abstrac	t	258.35
Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (in KB)
	1	Tender Documents	TD.pdf	Tender Document	554.88
	2	BOQ	BOQ 1047484.xls	Financial Bid	347.00
		<b>L</b>	<u>,                                     </u>	,	
Tender Inv					
<u>Tender Inv</u> Name					



# AGENCY FOR NEW & RENEWABLE ENERGY RESEARCH AND TECHNOLOGY (ANERT)

Department of Power, Government of Kerala Thiruvananthapuram, Kerala – 695 033; Phone: (91-471) 2334122, 2334124, 2331803(office), 2329854 Fax: (91-471)2329853 www.anert.gov.in, projects@anert.in

# **E-TENDER DOCUMENT**

# Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

Ref. No.: ANERT-IDK/8/2024-DE (IDK)

**PART 1 – GENERAL CONDITIONS** 

Date of Publishing of Bids :- 23/05/2024

Last Date of Submission of Bids :- 31/05/2024

# **CONTENTS**

E-Tendi	er Notice	1
TENDER	Abstract	2
Genera	L TERMS AND CONDITIONS FOR E-PROCUREMENT	3
1.	ONLINE BIDDER REGISTRATION PROCESS:	3
2.	ONLINE TENDER PROCESS:	3
З.	DOCUMENTS COMPRISING BID:	
4.	COST OF TENDER FORM AND EARNEST MONEY DEPOSIT (EMD)	
5.	SUBMISSION PROCESS:	8
6.	VALIDITY	8
7.	DEVIATIONS	8
8.	BLACK LIST	
9.	BIDDER'S LOCATION	
10.	CORRUPT AND FRAUDULENT PRACTICES	
11.	CONFLICT OF INTEREST	
12.	CONFIDENTIALITY	
13.	APPLICABLE LAW	
14.	AMENDMENT OF TENDER DOCUMENT	
15.	COMMENCEMENT OF WORKS	
16.	GOVERNMENT OF KERALA – CORRUPT AND FRAUDULENT PRACTICES	11
Bid Qua	LIFICATION AND ELIGIBILITY REQUIREMENTS	
17.	BID QUALIFICATION REQUIREMENTS	
Conditi	IONS OF CONTRACT	
18.	GENERAL CONDITIONS	
19.	SPECIAL CONDITIONS	
SCOPE		
20.	SCOPE OF THE WORK	
21.	SCHEDULE OF SUPPLY	24
22.	PAYMENT	
23.	TECHNICAL SPECIFICATION OF SOLAR STREET LIGHT	
24.	BROAD PERFORMANCE PARAMETERS	
26.	LUMINAIRE	
27.	BATTERY	
28.	PV MODULE	
29.	ELECTRONICS INCLUDING PROTECTION	
30.	MECHANICAL COMPONENTS AND INSTALLATION.	
31.	INDICATORS	30
32.	OTHER FEATURES	
33.	QUALITY AND WARRANTY	
34.	DOCUMENTATION	-
35.	INSURANCE	
	IRE A – FORMAT FOR COVERING LETTER	
	ire B- Agreement	
	IRE C - UNDERTAKING BY THE AGENCY	
	IRE D – DECLARATION BY THE BIDDER	
	RE E – DECLARATION OF RELATIONSHIP WITH ANERT EMPLOYEE	
Annexu	RE F – BIDDER'S TECHNICAL INFORMATION SUMMARY	38

# **E-TENDER NOTICE**

Competitive e-tenders in one cover system with Earnest Money Deposit (EMD) and Price Bid in accordance with the ANERT approved technical specifications are invited from **ANERT Empanelled Agencies under Solar Street Lighting Systems** for the *Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.* The e-tender documents can be downloaded from the e-tendering website of Govt. of Kerala. Tender form will not be available in any other form.

Thiruvananthapuram

**Chief Executive Officer** 

23/05/2024

# **TENDER ABSTRACT**

Ref. No.	ANERT-IDK/8/2024-DE (IDK)
Name of Work	Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.
Download of Tender Form	http://www.etenders.kerala.gov.in
Last date of submission of Tender	31/05/2024 @ 03.00 PM
Date and Time of opening the Tender	31/05/2024@ 04.00PM
Cost of Tender Form	Rs. 519/- (incl 18% GST)
EMD Amount	Rs. 5,500/-
Warranty period	5 years from the date of Commissioning the system.
Availability of Tender Forms	Tender form to be downloaded from the website <u>http://www.etenders.kerala.gov.in</u>
Place of opening of tender	Office of CEO, ANERT Law College Road, Vikas Bhavan. PO, Thiruvananthapuram - 695 033, Kerala

Thiruvananthapuram 23/05/2024

Chief Executive Officer

Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

Page **2** of **39** 

# **GENERAL TERMS AND CONDITIONS FOR E-PROCUREMENT**

This e-Tender is being published for the Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki. The tender is invited in single cover system through e-procurement portal of Government of Kerala (<u>www.etenders.kerala.gov.in</u>). Prospective bidders willing to participate in this tender shall be an empanelled agency approved by ANERT for the installation of Solar Street Lighting Systems during the year 2024 and shall necessarily register themselves with above mentioned e-procurement portal.

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

#### **1. ONLINE BIDDER REGISTRATION PROCESS:**

- i. 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 <u>www.cca.gov.in</u>. Once, the DSC is obtained, bidders have to register on <u>www.etenders.kerala.gov.in</u> 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.
- 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: <u>helpetender@gmail.com/etendershelp@kerala.gov.in</u> for assistance in this regard

#### 2. ONLINE TENDER PROCESS:

The tender process shall consist of the following stages:

- Downloading of tender document: Tender document will be available for free download on <u>www.etenders.kerala.gov.in</u>. 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 <u>www.etenders.kerala.gov.in</u> 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 <u>www.etenders.kerala.gov.in</u>. 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 emailed by the bidder to the help desk (helpetender@gmail.com/ etendershelp@kerala.gov.in), for resolution of the problem. At the same time, problem must be intimated to the concerned Tender Inviting Authority via email.
- vi. The time taken to ascertain, evaluate and suggest a solution for the problem reported by bidder may vary from case to case. Hence bidders are advised to submit the bid **at least 2 working days before the due date** and time of bid submission to avoid any last-minute issues that may come up.
- vii. Opening of Bid and Bidder short-listing: The single cover bids will be opened, evaluated and shortlisted as per the eligibility. Failure to submit the required documents online will attract disqualification. Price bids of the eligible bidder's will open the same day of opening and the work will be awarded.
- viii. ANERT doesn't take any responsibility for any technical snag or failure that has taken place during document upload.

#### **3. DOCUMENTS COMPRISING BID:**

- 3.1. The 1-cover bid shall contain the scanned copies of the following documents which every bidder has to upload:
  - i. The tender document duly signed downloaded from the website.
  - ii. Format for covering letter (Annexure A)
  - iii. Agreement in the prescribed format (Annexure B) on Govt. of Kerala stamp paper worth Rs.200/-
  - iv. Undertaking by the agency (Annexure C).

- v. Declaration regarding the use of components.
- vi. Copy of PAN card of the authorized signatory
- vii. Declaration by the Bidder (format as in Annexure D)
- viii. Declaration of Relationship with ANERT Employee (Annexure E)
  - ix. Summary of bidders Technical Information (Annexure F)
  - x. The Price Schedule as per BOQ in Excel format for this tender to be downloaded from e-tender website, duly digitally signed by the tenderer/authorized signatory of the tender.
  - xi. Bill of Material
- 3.2. The department doesn't take any responsibility for any technical snag or failure that has taken place during document upload.
- 3.3. The Bidder shall complete the Price bid as per format given for download along with this tender.
  - <u>Note</u>: The blank price bid should be downloaded and saved on bidder's computer without changing file-name otherwise price bid will not get uploaded. The bidder should fill in the details in the same file and upload the same back to the website.
- 3.4. Fixed price: Prices quoted by the Bidder shall be fixed during the bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable/ variable price quotation will be treated as non responsive and rejected.

# 4. COST OF TENDER FORM AND EARNEST MONEY DEPOSIT (EMD)

a. The Bidder shall pay, a tender form fee of Rs. 519/- and Earnest Money Deposit or Bid Security of Rs. 5,500/- for participating in the Tender for the Installation of Solar LED Street Lighting Systems. The Bid security is required to protect the purchaser against risk of Bidder's conduct, which would warrant the forfeiture of security. b. 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) Int	ernet 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		

Page 6 of 39

Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

30	Karnataka Bank		
31	Karur Vysya Bank		
B) In	ternet Banking Options (Corpo	rate)	
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	Janta Sahakari 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*<sup>\*</sup> will be shown. Here, Bidder may proceed as per below:

- a) <u>SBI Account Holders</u> shall click <u>SBI</u> option to with its Net Banking Facility., where bidder can enter their internet banking credentials and transfer the Tender Fee and EMD amount.
- b) <u>Other Bank Account Holders</u> may click <u>Other Banks</u> 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.

#### 5. SUBMISSION PROCESS:

- i. For submission of bids, all interested bidders have to register online as explained above in this document. After registration, bidders shall submit their Technical bid and Financial bid online on <u>www.etenders.kerala.gov.in</u> along with online payment of tender document fees and EMD.
- ii. For page-by-page instructions on bid submission process, please visit <u>www.etenders.kerala.gov.in</u> and click "Bidders Manual Kit" link on the home page.
- iii. 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.

### 6. VALIDITY

- i. The tender offer shall be valid for a period of 6 months from the last date of Submission of tender.
- ii. Further, ANERT may extend the validity of the Bids without altering the general and technical criteria of Bid for further periods, if so required

#### 7. DEVIATIONS

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

#### 8. BLACK LIST

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,

Page 8 of 39

they shall be blacklisted for future tenders/ association with ANERT and registration fee paid shall be forfeited against any losses incurred by ANERT

#### 9. BIDDER'S LOCATION

- i. 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.
- ii. All communication shall be made to the registered email of the bidder in the etendering systems and ANERT shall not be responsible for non-receipt or delay of any such communication.

#### **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.

### **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 this document, 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 Tender document.

#### **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 agency (ies) intends to contact ANERT on any matter related to the selection process, it should do so only in writing.
- iv. The Bids should be submitted only through the e-tender portal www.etenders.kerala.gov.in. Agency (ies) shall upload all the necessary documents in the e tender portal before the last date & time for online submission. Proposal received after the submission deadline will be treated as non-responsive and will be excluded from further evaluation process.
- v. 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 tender 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

Page 10 of 39

not provided properly, the tender will be liable for rejection. Tender Evaluation committee may seek clarification, if required, while evaluating the proposal.

vi. The technical bid opening date, time and the address are as stated in the tender document. The Financial Proposal shall remain securely stored online till the technical evaluation is completed and the results intimated to all successful bidders

#### **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.

#### **14. AMENDMENT OF TENDER DOCUMENT**

At any time prior to the deadline for submission of the bid, ANERT may for any reason, modify the tender 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.

#### **15. COMMENCEMENT OF WORKS**

The successful bidder should sign the contract agreement within 7 days of issue of work order. The successful bidder should start the services as defined in the scope of work within 15 days of Issue of work order.

#### **16. 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

Page 11 of 39

competition, economy and efficiency, transparency, and fairness. The selected service provider shall permit the representative of ANERT to inspect the accounts, records and other documents relating to the submission of the proposal and execution of the contract, in case of award of the contract work.

Page 12 of 39

# **BID QUALIFICATION AND ELIGIBILITY REQUIREMENTS**

#### **17. BID QUALIFICATION REQUIREMENTS**

- a. Every tenderer should submit along with his e-tender an Earnest Money Deposit (EMD). This may be done electronically from any of the Nationalized/Schedule Banks. The EMD of the disqualified tenderers will be returned automatically through e-procurement system. The EMD of the successful tenderers may be adjusted towards the security deposit. No interest shall be paid for the earnest money deposited.
- b. Prospective bidders willing to participate in this tender shall be an empanelled agency approved by ANERT for the installation of Solar Street Lighting / Flood Lighting Systems during the year 2024.
- c. Only bids of the ANERT Empanelled agencies registered under solar street light project will be considered Copy of the empanelment number must be provided along with the bid.
- d. Vendor should have at least one service centre / authorised service provider in Kerala. Detailed list with address, contact details have to be submitted.
- e. Price Bid in excel format, for this tender to be downloaded from e-tender website, duly digitally signed by the tenderer/authorized signatory of the tender.
- f. Annexure A on letter head of the bidder firm, an agreement on Rs.200/- Kerala stamp paper as per the format given in Annexure B and Annexure C must be submitted along with Tender document.
- g. The bidders should quote their allowable rate of price inclusive of expenses related to transportation, handling, supply, installation and commissioning and inclusive of applicable taxes.
- h. The uploaded bid document shall necessarily contain the scanned copies of the whole tender document signed and stamped by the authorized signatory of the bidder for the acceptance of all the tender conditions. No relaxation or change in the tender conditions will be allowed.

- i. The technical specifications of this particular tender will supersede the technical conditions for empanelment 2024
- j. The lowest bidder L1 has to submit at least 50 % of the materials at sites within two weeks of issue of the work order, failing which second lowest bidder L2 will be given opportunity, provided he is agreeing to match the rate and supply materials with similar conditions.

# **CONDITIONS OF CONTRACT**

#### **18. GENERAL CONDITIONS**

- i. The tenders should be submitted online at <u>www.etenders.kerala.gov.in</u>
- ii. The tenders should be as per the prescribed form which should be downloaded from the website <u>www.etenders.kerala.gov.in</u>. The cost of tender forms should be paid online, and once paid will not be refunded. Tender forms are not transferable. Tenders that are not in the prescribed form are liable to be rejected.
- iii. Intending tenderers should submit their tenders on or before the due date and time mentioned in the tender abstract. Late tender will not be accepted.
- iv. The rates quoted should be only in Indian currency. Tenders in any other currency are liable to rejection. The rates quoted should be for the unit specified in the schedule attached.
- v. The tenderer shall submit a copy of PAN card of the authorised signatory along with tender.
- vi. Every tenderer should send along with his tender an Earnest Money Deposit. This may be paid online at the e-tenders website.
- vii. If any tenderer withdraws from his e-tender before the expiry of the period fixed for keeping the rates firm for acceptance, the earnest money if any, deposited by him, will be forfeited.
- viii. The final acceptance/rejection of the tenders rests entirely with CEO, ANERT who do not bind themselves to accept the lowest or any tender.
- ix. In the case of materials of technical nature, the successful tenderer 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

Page 15 of 39

agreement for the due fulfilment 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:

- a. 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 of tenderer during the 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 fulfilment 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.
- b. There will be no exemption for MSEs in depositing this security amount. If the successful tenderer fails to deposit the security and execute the agreement as stated above, the EMD deposited by the bidder will be forfeited to ANERT and contract arranged elsewhere at the defaulter's risk and any loss incurred by ANERT on account of the purchase will be recovered from the defaulter who will however not be entitled to any gain accruing thereby.
- c. 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.
- x. 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

Page 16 of 39

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.

- xi. 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.
  - a. All payments to the contractors will be made by ANERT/concerned in due course as mentioned in this document.
  - b. All incidental incurred by ANERT for making payments outside the State in which the claim arises shall be borne by the contractor.
- xii. Payments will be made only after the supply, Installation and Commissioning of the items and certification by the competent technical personnel of ANERT.
- xiii. 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, that if such consent be given at any time, the contractor shall not be relieved from any obligation, duty or responsibility under this contract.
- xiv. 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

Page 17 of 39

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.

XV.

In case the contractor fails to supply and deliver any of the said articles and things or the works 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.

- xvi. 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.
- xvii. 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.
- xviii. The tender shall undertake the installation and commissioning of the system according to the standards and specification.
  - xix. No representation for enhancement of rate once accepted will be considered.
  - xx. The prices quoted should be inclusive of GST and all other expenses which are or may become payable by the contractor under existing or future laws or rules of the country of origin/supply or delivery during the course of execution of the contract.
  - xxi. The tenderer will invariably furnish the required certificates with their bills for payment –

Page 19 of 39

Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

- xxii. Special conditions, if any, of the tenderers attached with the tenders will not be applicable to the contract unless they are expressly accepted in writing by the purchaser.
- xxiii. The tenderer should send along with his tender an agreement executed and signed in Kerala Stamp Paper of value Rs.200/-. A specimen form of agreement is given as Annexure B to this tender. Tenders without the agreement in stamped paper will be rejected outright.
- xxiv. Conditions in the technical document, technical specifications of this tender document would override these general conditions, wherever applicable.
- xxv. 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.
- xxvi. 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.
- xxvii. 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.

#### **19. SPECIAL CONDITIONS**

- i. Each bidder should submit only one (1) bid. Any bidder who submits/participates in more than one bid for the work shall be disqualified.
- ii. The tenders will be opened in the presence of bidders present at the date and time advised in the Bidding Document. If the due date for receiving and opening the tender happens to be declared holiday, then the tender will be received and opened on the very next day, for which no prior intimation will be given.

- iii. If the bidder has NOT submitted the requisite EMD OR Agreement, OR if the price bid is not submitted along with the tender, such tenders will be summarily rejected.
- iv. During the tender evaluation, ANERT may seek more clarifications/details from any or all of the tenderers, if felt necessary.
- v. The price bids of the tenderers, which submitted the required documents only, will be opened and the L1 bidder will be awarded the work of supply and installation of items after fulfilling all the requirements.
- vi. ANERT reserves the right to increase / decrease the final quantity to be ordered without changing the unit price offered by the bidder.
- vii. Valid test certificate of the model offered / sub-components such as SPV module, battery and LED luminaire as per the technical specification provided in this tender document, issued by MNRE or NABL accredited labs should be enclosed.
- viii. If more than one model with different sub-components (such as battery, modules or LED luminaire) is offered for the price quoted, test certificates of the components (as per technical specifications provided in this tender document) should be submitted. Supplies shall be limited to only the model(s) offered to and approved by ANERT.
  - ix. If more than one models are offered by the bidder (all meeting the required specifications), all of them should be offered at the same price. If different prices are listed, all the models will be considered against the lowest price offered only.
  - x. If found essential, ANERT reserves the right, in the interest of completion of work within the time limit, to award portion/portions of the Work order to next higher bidders, called for negotiation in the increasing order of their price offers, if they agree to supply at the L1 price.
  - xi. Total system warranty (including luminary and battery) should be 5 years from date of Commissioning.
- xii. Solar module must have IEC 61215, IEC 61730 & IEC 61701 or equivalent BIS standard. Copy of the test certificate should be attached with the tender document (for the quoted model of module).
- xiii. Lithium Ferro phosphate Battery must have 5-year warranty. Copy of certificate of IEC 62133 should be provided with the tender document.

Page 21 of 39

- xiv. Light unit must have LM 80 report for LED and LM 79 report for luminary. Copy of the report should be attached with the tender document.
- xv. White Light Emitting Diode (W-LED) (SMD LED) with a minimum 150 lumens/watt. White colour (colour temperature 5000°-6500°K), the illumination should be uniform without dark bands or abrupt variations, and soothing to the eyes. Higher light output will be preferred.
- xvi. The rate quoted should be all inclusive including delivery of materials at the locations to be specified, and the cost of materials and labour for the civil works, installation and commissioning, warranties, GST and all other expenses.
- xvii. The price quotes should be inclusive of initial cost of supply, installation and commissioning, support during the warranty period of 5-years.
- xviii. The tender offer shall be kept valid for acceptance for a period of 6 months from the date of opening of bid. The offers with lower validity period are liable for rejection.
  - xix. The evaluation of the price bid will be based on the all-inclusive amount quoted.

#### **20. SCOPE OF THE WORK**

The scope covers Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki. A stand- alone solar photovoltaic street lighting system is an outdoor lighting unit used for illuminating a street or an open area. A solar street lighting system consists of a PV Module, control electronics, storage battery, W-LED based Luminaire, interconnecting 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 daytime. The battery placed inside the battery box is charged by electricity generated by the PV module during daytime and the luminaire provides light from dusk to dawn. The system lights at dusk and switches off at dawn automatically. During the dusk to dawn operation, the brightness of the LED will be reduced by 50% for 4 hours for saving power from 12 mid night to 4 am (Timing subject to site specific conditions)

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

The list of sites for installation is as below:

S/N	District	Location	Capacity of Luminary (W)	Approx Quantity
1	IDUKKI	Udumbanoor Grama Panchayath	20	4 Nos

# 21. SCHEDULE OF SUPPLY

- i. The items should be delivered and installed at the sites of institution for which work order shall be given and specified by ANERT, under prior intimation and supervision of ANERT.
- ii. The list of locations is given below. The exact installation spot to be finalised after joint site visit along with the concerned official from ANERT and the successful bidder.

S/N	District	Location	Capacity of Luminary (W)	Approx Quantity
1	IDUKKI	Udumbanoor Grama Panchayath	20	4 Nos

iii. If the successful bidder fails to deliver the materials within the days mentioned below, the order stands cancelled and ANERT will reward the work to the next bidder and penalty as decided by ANERT will be levied.

#	Capacity of	Material Delivery	Completion
	Luminary (W)	(Days)	Period (Days)
1	20	21	30

- iv. For any delay in Installation and Commissioning beyond the period mentioned above, the ANERT will charge penalty of 0.5% of the order value/week or part thereof, subject to the cost not exceeding 10% of the total cost.
- v. Order will be cancelled if the delay of service is more than this time period and work will be issued to the second successful bidder
- vi. In case of no valid reason, extension of time of completion that can be granted at a time shall be 25% of the original time. The maximum extension that can be granted for a work shall be limited to half the original time of completion.
- vii. When the contract period has to be extended wholly or partly due to default on the part of the bidder, the Agreement Authority may sanction extension of time after imposing fine as mentioned below;

Period	Rate of Fine
First Extension	1% of the PAC subject to a minimum of Rs. 1000/- and maximum of Rs. 50,000/
Second Extension	2% of the PAC subject to a minimum of Rs. 2000/- and maximum of Rs. 1,00,000/-

Page 24 of 39

Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

Penalty for delay in supply and installation will be imposed at 0.5 % per week up to a maximum 10%. In case of delay in supply and installation, CEO, ANERT may cancel the contract and take recourse to other action as deemed.

For clarifications regarding the site, please contact respective ANERT District Office as mentioned below:

S/N	District	Mobile	Email
1	IDUKKI	9188119406	idukki@anert.in

#### **22. PAYMENT**

- a. No advance payment will be given. No advance payment will be given. All the documents submitted should be certified by the concerned District Office of ANERT.
- b. The terms of payment shall be:
  - i. 2.5 % of the invoice amount including 18% GST shall be charged by ANERT as non-refundable license fee and the remaining amount shall be treated as contract value for further payment.
  - ii. On completion of the installation of the Solar Street Lighting system, 90% of the contract value shall be released. The supplier shall submit the invoice for the materials supplied and all documents related including the Project Completion Report certified by the district office for the release of the amount. The PCR submitted will be used for conducting the precommissioning inspections. All documents related to the completion of the work including commissioning report and the performance reports shall be submitted for the release of the amount.
  - iii. The balance 10% shall be retained as performance security and will be released in equal parts of 2% on yearly basis till the completion of 5<sup>th</sup> year of warranty. For each of these payment releases, the performance report from the previous submission till the day before new submission must be provided. This can be released against a bank guarantee of equivalent amount valid for 5 years.

- iv. The security deposit of 3% furnished along with the contract agreement shall be released on successful completion of supply, installation and commissioning.
- c. Income tax, contribution to workers' welfare fund and other statutory deductions shall be made from the payment as per prevailing norms.

## 23. TECHNICAL SPECIFICATION OF SOLAR STREET LIGHT

# Solar Street Lighting System Model-C (Non- integrated without dimming):

LED Luminai	re	: 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.

### 24. BROAD PERFORMANCE PARAMETERS

LED	White Light Emitting Diode (W-LED) with minimum luminous		
	efficacy of 160 lumen/watt		
Luminaire	Minimum luminaire efficacy should be 150 lumen/watt		
Colour	White colour (colour temperature 5000°-6500°K), the		
Temperature	illumination should be uniform without dark bands or abrupt		
	variations, and soothing to the eye. Higher light output will be		
	preferred.		
Electronics	Min 90% total.		
Efficiency			
Duty cycle	Dusk to dawn with 50% dimming during 12 midnight and 4 am.		
Make of LED	NICHIA/ CREE/ OSRAM/ PHILIPS or equivalent		
Charge Controller	МРРТ		

### **25. DUTY CYCLE**

• The W-LED solar street lighting system should be designed to operate from dusk to dawn, under average daily insolation of 5.0 kWh /sq m on a horizontal surface.

### **26. LUMINAIRE**

- The light source will be of 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 light output from the white LED light source should be constant throughout the duty cycle. Proper lens to be provided for the LED for effective lumen spread.
- The lamps should be housed in an assembly suitable for outdoor use. It should be made of pressure die cast aluminium. 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.

### **27. 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.

#### **28. PV MODULE**

- The PV module(s) should be indigenously manufactured and contain crystalline silicon cells (Poly-crystalline or Mono-crystalline). It is required to have certificates for the supplied PV module as per IEC 61215, IEC 61730 and IEC 61701 specifications or equivalent BIS specifications.
- The power output of the PV module must be reported under standard test conditions (STC) at 16.4-volt load voltage. I-V curve of the sample module should be submitted.
- iii. The open circuit voltage of the PV modules under STC should be at least 21.0 volt.
- iv. The PV module efficiency should be above 14 %.
- v. The terminal box on the module should have a provision for opening for replacing the cable, if required.
- vi. 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

### **29. ELECTRONICS INCLUDING PROTECTION.**

- i. The total electronic efficiency should be at least 90%.
- ii. Electronics should operate at 24V/36V/48V and should have temperature compensation for proper charging of the battery throughout the year.
- iii. The light output should remain constant with variations in the battery voltages.
- iv. The system should have protection against battery overcharge and deep discharge conditions.
- v. Fuse should be provided to protect against short circuit conditions.

- vi. 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.
- vii. The charge controller should be in corporate with MPPT. Programmable facility should be incorporated for regulating dimming of the luminaire.
- viii. Adequate protection to be provided against battery reverse polarity
  - ix. Adequate protection is to be incorporated under No Load conditions.
  - x. Load reconnect should be provided at 60% of the battery capacity status.
  - xi. Necessary lengths of wires / cables and appropriate fuses should be provided.

#### **30. MECHANICAL COMPONENTS AND INSTALLATION.**

- i. Aluminum frame structure, with anodizing to be fixed on the pole to hold the SPV module. The frame structure should be inclined at an angle of 10 degree from the horizontal to mount the PV module. The luminaire should be fixed to the pole on aluminium arm. The Aluminum arm for holding the luminaire should have suitable length and should be set at a suitable angle to maximize lux of desired level over the specified area.
- A vented ABS/Alluminium box (IP66 protection) with suitable structure is to be fixed on the pole for housing the storage battery with locking arrangement facility.
- iii. All mechanical metallic parts shall be of aluminium/ stainless steel of suitable thickness to withstand loads including wind loads and should have good aesthetic appearance. All external parts should be Aluminium/Stainless Steel and should be replaced during the warranty period in case of any defects. All nuts and bolts used should be of stainless steel.
- iv. The foundation of the mast should be of M25 grade concrete 500mm x 500mm x 800mm below ground level and 200 mm above ground level. PCC of 100mm thickness shall be done after earth compacting, 12mm and 8mm dia reinforcement also to be used.
  - v. The mast should be of G.I. Height of the mast should be 6 metre with minimum 210 mm size at bottom and 90 mm size at top. The foundation base

Page 29 of 39

plate should be of size 220mm x 220mm x 16 mm fixed above ground level. The minimum thickness of the G.I shaft shall be 3mm. The system shall include ring arm bracket for mounting luminaires, bracket for mounting PV modules and battery box.

#### **31. INDICATORS**

- i. The system should have two indicators, green and red.
- ii. 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.
- iii. Red indicator should indicate the battery "Load Cut Off" condition

#### **32. OTHER FEATURES**

- There will be a Name Plate (12" X 6") on the pole (2 m above ground level), which should be displayed with the following details
  - a) Name of the supplier.
- b) Phone number of service centres.
- c) Date of installation.
- d) Name of Implementing Agency.
- ii. Necessary lengths of wires/cables and fuse should be provided.
- iii. Quality stickers with post number will have to be provided on the pole.

#### 33. QUALITY AND WARRANTY

- i. 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.
- ii. White LED solar street lighting system including the battery will be warranted for a period of 5 years from the date of commissioning.
- iii. 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 and 80% at the end of 25 (twenty five) years.

Page 30 of 39

#### **34. 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.

#### **35. INSURANCE**

a. The street lighting systems must be insured at every stage of operation – from Material dispatch, storage, completion of installation and till 5 years after commissioning. The insurance coverage on handing over of the system must include all conditions of Standard Fire and Special Perils Policy (Material Damage) and Burglary & Theft Insurance Policy. The insurance premium for the 5 years of warranty is to be paid by the bidder. On handing over of the system, the original insurance policy is to be handed over to the authorised person at the site of installation and a copy to ANERT District Office. The annual premium payment receipt must be handed to the authorised person at the site of installation.

# **ANNEXURE A – FORMAT FOR COVERING LETTER**

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

I/We hereby offer e-tender to supply, under annexed terms and conditions of contract, the whole of the articles referred to and described in the attached specification and quantity decided by the Agency for New and Renewable Energy Research and Technology (ANERT), at the rates quoted for the Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

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

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

Yours faithfully,

Place:

Signature:

Date:

Name:

Designation:

(Office Seal)

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

Page 32 of 39

Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

# **ANNEXURE B- AGREEMENT**

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

ARTICLES OF AGREEMENT executed on this the day of
Two thousand andbetween the <b>Agency for</b>
New & Renewable Energy Research and Technology (hereinafter referred to as
ANERT) of the one part and Sri
(Name and Address of the tenderer) hereinafter referred to as "the Bounden") of the
other part.

AND WHEREAS the bounden has furnished to ANERT a sum of Rs. ...... as Earnest Money Deposit for execution of an agreement undertaking the due fulfilment of the contract in case his e-tender is accepted by ANERT. NOW THESE PRESENTS WITNESS and it is hereby mutually agreed as follows: -

In case the e-tender submitted by the bounden is accepted by ANERT and the contract for ...... is awarded to the bounden, the bounden shall within <u>Fifteen</u> days of acceptance of this etender, execute an agreement with ANERT incorporating all the terms and conditions under which ANERT accepts this e-tender.

In case the bounden fails to execute the agreement as aforesaid incorporating the terms and conditions governing the contract, ANERT shall have power and authority to recover from the bounden any loss or damage caused to ANERT by such breach as may be

Page 33 of 39

determined by ANERT by appropriating the moneys inclusive of Earnest Money deposited by the bounden and if the Earnest Money is found to be inadequate the deficit amount may be recovered from the bounden and his properties movable and immovable in the manner hereinafter contained.

All sums found due to ANERT under or by virtue of this agreement shall be recoverable from the bounden and his properties movable and immovable under the provisions of the Revenue Recovery Act for the time being in force as though such sums are arrears of land revenue and in such other manner as ANERT may deem fit.

In witness whereof Sri ...... (Name and Designation) for and on behalf of the Agency for New & Renewable Energy Research and Technology and Sri ...... the bounden have hereunto set their hands the day and year shown against their respective signature.

Signed by Sri	Signed by Sri
(Date	(Date)
in the presence of witnesses	in the presence of witnesses
1.	1.

2.

2.

# **ANNEXURE C - UNDERTAKING BY THE AGENCY**

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

I ..... (Name, Designation) authorised signatory of

(Name and full address of the EPC contractor /Public sector undertaking) hereby undertake that

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

Date:

Signature of the authorised signatory:

Name:

Designation:

(Office Seal)

Page 35 of 39

Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

# **ANNEXURE D – DECLARATION BY THE BIDDER**

E-Tender Notification No: ....., dtd ....., dtd ....., for Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

То

The CEO ANERT

Date :

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 for the due performance of the Contract;
- 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. We declare that our firm is not currently black listed by MNRE or any other State Govt. agencies.

Signature	:	
Name	:	
Seal	:	

# **ANNEXURE E – DECLARATION OF RELATIONSHIP WITH ANERT EMPLOYEE**

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

Tender Notification No.: .....

Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

То

The CEO ANERT

Name of the ANERT employee with Designation:

Name of the bidder related to the employee:

Signature

Name

Date

Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

Page 37 of 39

# **Annexure F – BIDDER'S TECHNICAL INFORMATION SUMMARY**

	1		
1.	Name of the bidder as in regist	tration	
	certificate.		
2.	Address in full		-
3.	Contact Details		
з.	Mobile:		
	Land Phone:		
	Fax No. :		
4	Email address:		
4.	Name of the authorised signat	ory	
5.	Designation of the authorised	signatory	
6.	Whether the bidder is a bo	nafide	
-	manufacturer/integrator of th		
	tendered(Yes/NO)		
7.			
/.	Details of Solar LED Street Lighting System offered		
	LED Luminaire :		
	PV module:		
		Make	
		Model	
	Battery:		
	5	Make	
		Model	
		Model	
	LED:	_	
		Make	
		Model	

(To be filled in by bidder. Use copies, for each model offered)

Page **38** of **39** 

Supply, Installation & Commissioning of 4 Nos. of (20W/Model-C) Solar Street Lighting Systems at Udumbanoor Grama Panchayath, Idukki.

8.	Name of the Lab from which test Certificate is obtained	
9.	Date and No. of valid Test certificate Produced	

I have read the General Tender Terms & Conditions for e-Procurement, General Conditions, Special Conditions and Bidder's Technical Information Summary of this etender and hereby agree to participate in the e-tender strictly adhering to the conditions and the details furnished along with bid are true and correct.

Signature of authorised signatory

Name

Designation

Date: