



eTendering System Government of Kerala							
 Kerala Tenders		Tender Details					
Date : 22-Mar-2023 06:06 PM							
 Print							
Basic Details							
Organisation Chain	ANERT						
Tender Reference Number	ANERT-TECH/210/2022-T3						
Tender ID	2023_ANERT_555319_4						
Tender Type	Open Tender	Form of contract	EPC Contract				
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			Cover Details, No. Of Covers - 2				
Online Bankers	S.No	Bank Name	Cover No	Cover	Document Type	Description	
	1	SBI MOPS	1	Fee/PreQual /Technical	.pdf	Technical Bid	
					.pdf	Pre Agreement and Signed Tender Document	
			2	Finance	.xls	Financial Bid	
Tender Fee Details, [Total Fee in ₹ * - 2,950]				EMD Fee Details			
Tender Fee in ₹	2,950			EMD Amount in ₹	41,250	EMD through BG/ST or EMD Exemption Allowed	Yes
Fee Payable To	Nil	Fee Payable At	Nil	EMD Fee Type	fixed	EMD Percentage	NA
Tender Fee Exemption Allowed	Yes			EMD Payable To	Nil	EMD Payable At	Nil
Work /Item(s)							
Title	Retender for the Supply, Installation and Commissioning of 22 Nos of standalone Off Grid SPV Power Packs for Push Carts in Kollam and Alappuzha Districts						
Work Description	Retender for the Supply, Installation and Commissioning of 22 Nos of standalone Off Grid SPV Power Packs for Push Carts						
Pre Qualification Details	Please refer Tender documents.						
Independent External Monitor/Remarks	NA						
Tender Value in ₹	16,50,000	Product Category	Solar Power Plants	Sub category	NA		
Contract Type	Tender	Bid Validity(Days)	60	Period Of Work(Days)	30		
Location	Kollam and Alappuzha Districts	Pincode	682001	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	22-Mar-2023 01:00 PM		Bid Opening Date	30-Mar-2023 03:30 PM			

Document Download / Sale Start Date	22-Mar-2023 01:00 PM	Document Download / Sale End Date	29-Mar-2023 03:00 PM
Clarification Start Date	NA	Clarification End Date	NA
Bid Submission Start Date	22-Mar-2023 01:00 PM	Bid Submission End Date	29-Mar-2023 03:00 PM

Tender Documents

NIT Document	S.No	Document Name	Description	Document Size (in KB)
	1	Tendernotice_1.pdf	NIT and Abstract	286.36

Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (in KB)
	1	Tender Documents	RePushCart.pdf	Tender Document	638.65
	2	BOQ	BOQ_839132.xls	Financial Bid	337.00

Tender Inviting Authority

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



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

Department of Power, Government of Kerala
Thiruvananthapuram, Kerala – 695 033;
www.anert.gov.in , projects@anert.in

E-TENDER DOCUMENT

***Retender for the Supply, Installation and
Commissioning of 22 Nos of standalone Off-
Grid SPV Power Packs for Push Carts in
Kollam and Alappuzha Districts***

Ref. No.: ANERT-TECH/210/2022-T3

PART – 1

Date of Publishing of Bids : 22/03/2023

Last Date of Submission of Bids : 29/03/2023

CONTENTS

FORMAT FOR COVERING LETTER.....	1
E-TENDER NOTICE	2
TENDER ABSTRACT	3
GENERAL TERMS AND CONDITIONS FOR E-PROCUREMENT	4
1. <i>ONLINE BIDDER REGISTRATION PROCESS:</i>	4
2. <i>ONLINE TENDER PROCESS:</i>	4
3. <i>DOCUMENTS COMPRISING BID:</i>	5
4. <i>TENDER DOCUMENT FEES AND EARNEST MONEY DEPOSIT (EMD)</i>	6
5. <i>SUBMISSION PROCESS:</i>	9
6. <i>VALIDITY</i>	9
7. <i>DEVIATIONS</i>	10
8. <i>BLACK LIST</i>	10
9. <i>BIDDER'S LOCATION</i>	10
10. <i>BID QUALIFICATION REQUIREMENTS</i>	11
11. <i>GENERAL CONDITIONS</i>	13
12. <i>SPECIAL CONDITIONS</i>	19
13. <i>SCHEDULE OF SUPPLY</i>	21
14. <i>PAYMENT</i>	21
15. <i>SERVICE AND MAINTENANCE</i>	22
TECHNICAL SPECIFICATIONS.....	24
16. <i>SCOPE OF THE WORK</i>	24
17. <i>DEFINITION</i>	24
18. <i>DUTY CYCLE</i>	25
19. <i>LOAD</i>	25
20. <i>COMPONENTS AND SPECIFICATIONS</i>	25
21. <i>SPV MODULES</i>	25
22. <i>POWER CONDITIONING UNIT</i>	26
23. <i>ELECTRICAL SAFETY AND PROTECTION</i>	28
24. <i>INGRESS PROTECTION</i>	29

25	<i>BATTERY BANK</i>	29
26	<i>ARRAY SUPPORT STRUCTURE</i>	29
27	<i>AC PLUG POINTS</i>	30
28	<u><i>CONNECTED LOAD</i></u>	<u>30</u>
29	<i>CABLES, SWITCHES AND GENERAL REQUIREMENTS</i>	30
30	<i>AC/DC WIRING</i>	30
31	<i>WARRANTY</i>	30
32	<i>TECHNICAL DOCUMENTATION AND INSPECTION</i>	31
33	<i>BILL OF MATERIAL</i>	31
34	<i>SITE INSPECTION</i>	32
35	<i>DISPLAY BOARD</i>	33
	<i>ANNEXURE 1A – SUMMARY OF BID QUALIFICATION REQUIREMENTS</i>	34
	<i>ANNEXURE 1B-AGREEMENT</i>	35
	<i>ANNEXURE 1C – DECLARATION BY THE BIDDER</i>	37
	<i>ANNEXURE 1D– DECLARATION ON SUBSIDY CLAIM</i>	38
	<i>ANNEXURE 1E – DECLARATION OF RELATIONSHIP WITH ANERT EMPLOYEE</i>	39
	<i>ANNEXURE 2A -BIDDER’S TECHNICAL INFORMATION SUMMARY</i>	40

FORMAT FOR COVERING LETTER

(This letter to be submitted on the official letter head of the tenderer, signed by the 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 & Renewable Energy Research and Technology (ANERT), at the rates quoted against each item. The articles will be delivered and installed/commissioned within the time and at the place(s) specified in the schedule.

I am/We are remitting herewith the required amount of Rs. towards the cost of e-tender and Earnest Money Deposit by electronic payment vide transaction No dtd.....

Yours faithfully,

Place:

Signature

Date:

Name

Designation

(Office Seal)

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 ***experienced EPC contractors / System Integrators*** for the ***Retender for the Supply, Installation and Commissioning of 22 Nos of standalone Off-Grid SPV Power Packs for Push Carts in Kollam and Alappuzha Districts***. 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

22/03/2023

Chief Executive Officer

TENDER ABSTRACT

Ref. No.	ANERT-TECH/210/2022-T3
Name of Work	Retender for the Supply, Installation and Commissioning of 22 Nos of standalone Off-Grid SPV Power Packs for Push Carts in Kollam and Alappuzha Districts
Download of Tender Form	http://www.etenders.kerala.gov.in
Last date of submission of Tender	29/03/2023 @ 3.00 PM
Date and Time of opening the Tender	30/03/2023 @ 4.30 PM
Estimated Tender Value	Rs. 16,50,000/-
Cost of Tender form	Rs. 2,950/- (Including GST)
EMD	Rs. 41,250/-
Warranty period	5 years from the date of commissioning the system.
Availability of Tender Forms	Website http://www.etenders.kerala.gov.in
Place of opening of tender	Office of CEO, ANERT PMG - Law College Road, Vikas Bhavan. PO, Thiruvananthapuram, Kerala – 695 033

Thiruvananthapuram
22/03/2023

Sd/-
Chief Executive Officer

GENERAL TERMS AND CONDITIONS FOR E-PROCUREMENT

This e-Tender is being published for the Retender for the Supply, Installation and Commissioning of 22 Nos of standalone Off-Grid SPV Power Packs for Push Carts in Kollam and Alappuzha Districts. 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

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

2. ONLINE TENDER PROCESS:

The tender process shall consist of the following stages:

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

- iii. Publishing of Corrigendum: All corrigenda shall be published on www.etenders.kerala.gov.in and shall not be available elsewhere.
- iv. Bid submission: Bidders have to submit their bids along with supporting documents to support their eligibility, as required in this tender document on www.etenders.kerala.gov.in. No manual submission of bid is allowed and manual bids shall not be accepted under any circumstances.
- 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.

3. DOCUMENTS COMPRISING BID:

- 3.1 The 2 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. Summary of Bid documents (Annexure 1A)
 - iii. Pre-Agreement in the prescribed format (Annexure 1B) on Govt. of Kerala stamp paper worth Rs. 200/-
 - iv. Declaration regarding the use of components

- v. Declaration by the Bidder (format as in Annexure 1C)
- vi. Declaration of relationship with ANERT employee (format as in Annexure 1E)
- vii. Summary of bidders Technical Information (Annexure 2A)
- viii. 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.
- ix. 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.

Note: 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. TENDER DOCUMENT FEES AND EARNEST MONEY DEPOSIT (EMD)

4.1 The Bidder shall pay, a tender document fees of Rs. 2950/- (Inclusive of GST) and Earnest Money Deposit or Bid Security of Rs. 35,750/-. The Bid security is required to protect the purchaser against risk of Bidder's conduct, which would warrant the forfeiture of security.

4.2 Online Payment modes: The tender document fees and EMD 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	Shamrao Vitthal 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*** 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.*

5. SUBMISSION PROCESS:

- 5.1 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 www.etenders.kerala.gov.in along with online payment of tender document fees and EMD.
- 5.2 For page by page instructions on bid submission process, please visit www.etenders.kerala.gov.in and click “Bidders Manual Kit” link on the home page.
- 5.3 It is necessary to click on “Freeze bid” link/ icon to complete the process of bid submission otherwise the bid will not get submitted online and the same shall not be available for viewing/ opening during bid opening process.

6. VALIDITY

- 6.1 The tender offer shall be kept valid for acceptance for a period of 6 months from the date of opening of offers. The offers with lower validity period are liable for rejection.
- 6.2 Further, the tenderer may extend the validity of the Bids without altering the substance and prices of their Bid for further periods, if so required

7. DEVIATIONS

7.1 The offers of the Tenderers with Deviations in Commercial terms and Technical Terms of the Tender Document are liable for rejection.

8. BLACK LIST

8.1 All the intending tenderers 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 blacklisted for future tenders/ association with ANERT and EMD shall be forfeited against any losses incurred by ANERT.

9. BIDDER'S LOCATION

9.1 The tenderers 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.

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

BID QUALIFICATION REQUIREMENTS

10. BID QUALIFICATION REQUIREMENTS

- 10.1.1 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.
- 10.1.2 An agreement in Rs.200/- Kerala stamp paper as per the format given in Annexure IB must be submitted along with e-tender document.
- 10.1.3 Declaration regarding the use of components. The bidder must use PV modules listed in the ALMM list issued by MNRE vide order No. F. No. 283/54/2018-GRID Solar – Part (1) dtd 10/03/2021. Inverter must be selected within the approved component list of ANERT. A detailed BoM in the letter head of the bidder is to be provided along with the bid.
- 10.1.4 The bidder should have service centres/authorised service providers in Kollam / Alappuzha district. Detailed list with address, contact details and proof has to be submitted. If the bidder does not have such facility at the time of tendering, an undertaking should be submitted along with the tender on Kerala stamp paper worth Rs. 200/- agreeing to set up such facility and intimate the same within 15 days of letter of intent. Urja Mithra service centres supported by ANERT can also be included as service centres provided the bidders make separate agreements with them.
- 10.1.5 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.

10.2 Eligibility Requirement

10.2.1 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	<p>The Bidder should have any of the following legal status:</p> <ul style="list-style-type: none">a) Body incorporated in India under the Companies Act, 2013 including any amendment thereto; ORb) Body incorporated in India under the Limited Liability Partnership (LLP) Act, 2008 including any amendment thereto; ORc) Firm registered under Partnership Act, 1932 in India; ORd) Sole Proprietor <p>In case of JV, all the members must fulfil this requirement and submit the documents as per the Tender Document.</p>	<ul style="list-style-type: none">a) In case of Company – Copy of Registration/ Incorporation Certificateb) In case of LLP – Copy of Deed of Partnershipc) In case of Partnership – Copy of Deed of Partnershipd) 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 bidder must have completed Solar PV Installations of at least 25 kW in Kerala	Statutory Documents substantiating this requirement to be provided (Copies of work order and performance certificate of systems from user)
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 provide an Undertaking to this effect.

10.3 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	
	Bidder shall have experience in the execution of Supply, Installation and Maintenance of off-grid Solar Photovoltaic Systems of an aggregate capacity of 25 kW during last five financial years in Kerala	The details of projects executed during period mentioned above should be listed. Copy of work orders and a certificate issued by the beneficiary towards the satisfactory work completion to be furnished by the bidder. In absence of any one, it will not be considered for qualifying in technical bid.
1.2.	Financial Criteria	
1.2.1.	Minimum Annual Turnover during any 2 best out of last five financial years (FY17-18, FY18-19, FY19-20, FY20-21, and FY21-22) of the bidder shall not be less than 20 lakh.	Firm's Annual Audit Report, Balance sheet, Profit & Loss / CA certificate during any 2 best out of last five financial years i.e. (FY17-18, FY18-19, FY19-20, FY20-21, and FY21-22)

11. GENERAL CONDITIONS

- 11.1 The tenders should be submitted online at www.etenders.kerala.gov.in
- 11.2 The tenders should be as per the prescribed form which should be downloaded from the e-tender website. 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.
- 11.3 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.
- 11.4 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.
- 11.5 The tenderer shall submit a copy of PAN card of the authorised signatory along with tender.
- 11.6 Tenders subject to conditions will not be considered. They are liable to be rejected on that sole ground.

- 11.7 The tenders will be opened on the specified day and time in the office of the CEO, ANERT in the presence of such of those tenderer's representatives who may be present with proper authorisation issued by the tenderer.
- 11.8 Every tenderer should send along with his tender an Earnest Money Deposit. This may be paid online at the e-tenders website.
- 11.9 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.
- (a) The tenderer should use the components with in the approved component list published by ANERT.
- (b) The agency can take approval for the new components by submitting a request with relevant certificates and test reports.
- 11.10 The final acceptance/rejection of the tenders rests entirely with CEO, ANERT who do not bind themselves to accept the lowest or any tender.
- 11.11 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 e-tender normally constitutes a concluded contract. Nevertheless, the successful tenderer shall also execute an agreement for the due fulfilment of the contract within the period to be specified in the letter of acceptance. 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. This will be deducted from the payment of tenderer while releasing 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 5% 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

in clause 8 supra or in Fixed Deposit Receipts of State Bank of India endorsed in favour of District Engineer of the concerned District Office, ANERT. 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 earnest money deposited by him 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.

- (b) 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.
- (c) 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.

11.12 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 CEO ANERT in due course by NEFT transfer only
- (b) All incidental expenses incurred by ANERT for making payments outside the State in which the claim arises shall be borne by the contractor.

11.13 Payments will be made only after the Supply, Installation and Commissioning of the items and certification by the competent Technical personnel of ANERT.

11.14 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.

11.15 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.

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

11.17 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.

11.18 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.

11.19 The tenderer shall undertake the installation and commissioning of the system according to the standards and specification.

11.20 No representation for enhancement of rate once accepted will be considered.

11.21 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.

11.22 The tenderer will invariably furnish the required certificates with their bills for payment –

“Certified that the goods which GST has been charged have not been exempted under the GST Rules made there under and the charges on account of sales tax on these goods are correct under the provisions of the relevant Act or the rules made there under certified further that we (or our Branch or Agent) (Address) are registered as dealers in the State of under Registration No.”

- 11.23 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.
- 11.24 The tenderer should send along with this tender an agreement executed and signed in Kerala Stamp Paper of value Rs.200/-. A specimen form of agreement is given as Annexure I B to this tender. Tenders without the agreement in stamped paper will be rejected outright.
- 11.25 Conditions in the technical document, technical specifications and special conditions of this tender document would override these general conditions, wherever applicable.
- 11.26 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.
- 11.27 E-tender shall be opened at the time and date announced in the tender notice, and the date of opening of price bid will be updated in the website.
- 11.28 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.
- 11.29 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.

12. SPECIAL CONDITIONS

- 12.1 Each bidder should submit only one (1) bid. Any bidder who submits/participates in more than one bid for the work shall be disqualified.
- 12.2 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.

- 12.3 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.
- 12.4 During the tender evaluation, ANERT may seek more clarifications/details from any or all of the tenderers, if felt necessary.
- 12.5 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.
- 12.6 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.
- 12.7 The tenderer should use the components approved by ANERT for installation. (Component list published in ANERT website)
- 12.8 If the components quoted are not available in the existing list, bidders may submit the components for approval by submitting the relevant test certificate/reports.
- 12.9 During the implementation stage of the project, if the successful bidder could not supply the particular Make/Model of Solar Module/Inverter/BOS due to any valid reason, that should be intimated and approval may be sought from ANERT for change of any Make/Model of the above equipment.
- 12.10 The bidder can take approval for the new components by submitting a request with relevant certificates.
- 12.11 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 work, installation and commissioning, Warranties, GST and all other expenses.**

12.12 The price quotes should be inclusive of initial cost of supply, installation and commissioning, support during the warranty period of 5-years.

12.13 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.

12.14 The evaluation of the price bid will be based on the grand total of all-inclusive amount quoted excluding GST.

13. SCHEDULE OF SUPPLY

13.1 The Supply, Installation and Commissioning of the entire systems shall be completed within **30 days from the date of supply order**. This is the time period for handing over the system to ANERT and no time extension in this regard without valid reasons will be entertained.

13.2 Supply of the main components such as PCU, charge controller and battery should be from the approved component list published in ANERT Website. The PV module must be from the ALMM list published by MNRE from time to time.

13.3 If suitable Equipment with the above Specifications is not in the list of ANERT, tender may be quoted with the suitable equipment (Inverter, Gel Battery etc.) as per the specifications with all necessary certifications described in the respective clauses.

13.4 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 appropriate.

14. PAYMENT

14.1 No advance payment will be given. Payment will be released on receipt of invoices and successful installation and commissioning of power plant certified by the concerned District Office of ANERT.

14.2 The terms of payment shall be:

- i. 2.5 % of the invoice amount shall be charged by ANERT as non-refundable license fee.

- ii. On completion of the installation and commissioning of power plant, 90% of the remaining contract value will be released
- iii. The remaining 10% shall be retained as performance security as given below. On submission of equivalent bank guarantee for 5 years, the same shall be released.
- iv. The security deposit of 5% furnished along with the contract agreement shall be released on successful completion of supply, installation and commissioning.

14.3 Income tax, contribution to workers' welfare fund and other statutory deductions shall be made from the payment as per prevailing norms.

15. SERVICE AND MAINTENANCE

- 15.1 The faulty system or components should be replaced/ repaired within 10 days of fault reporting. The servicing should be carried out at the site of installation. The service personnel should visit the installations at least once in 3 months for preventive maintenance even if no faults are reported. **Reports of these preventive maintenance visits and generation data should be submitted to the concerned ANERT District Offices on a quarterly basis.** Delay in servicing beyond 15 days of fault reporting would attract penalty at the rate of at the rate fixed by CEO, ANERT and further actions will be initiated against the agency.
- 15.2 A designated contact Telephone Number and address should be submitted for reporting faults during the warranty period.



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

Department of Power, Government of Kerala
Thiruvananthapuram, Kerala – 695 033;
www.anert.gov.in , projects@anert.in

E-TENDER DOCUMENT

***Retender for the Supply, Installation and
Commissioning of 22 Nos of standalone Off-
Grid SPV Power Packs for Push Carts in
Kollam and Alappuzha Districts***

Ref. No.: ANERT-TECH/210/2022-T3

PART – 2

Date of Publishing of Bids : 22/03/2023

Last Date of Submission of Bids : 29/03/2023

TECHNICAL SPECIFICATIONS

16. SCOPE OF THE WORK

The scope covers supply, installation and commissioning of 22 nos. of Stand Alone Off-Grid Solar Photo Voltaic Power Packs for Push Carts in Kollam and Alappuzha Beach area.

17. DEFINITION

Standalone solar PV power pack systems comprise of mono crystalline silicon solar PV modules, gel battery bank with battery box, intelligent Inverter with MPPT charging technology which feeds uninterrupted quality AC power to electrical loads. Batteries will be charged from solar energy by charge controller integrated in the inverter or by an external charge controller with MPPT technology.

It is proposed to solarise 22 numbers of push carts selling ice creams and similar items in the two prominent tourist destinations at Kollam Beach and Alappuzha Beach as demonstration units. The vendors in these beaches are using the push carts for selling ice creams from 10 am to 8 pm on regular basis. The solar power pack is designed to provide uninterrupted power supply for the operation of the freezer and LED display lighting used in the push cart. Normally the cart is pushed by the vendors / cycled from their nearby houses to the beach in the morning and returned in the night for keeping the cart and equipment safely in the premises of house. During night time they provide electricity charging to the freezer and the tubular gel battery also will be charged for operating the LED display. Normally 2.5 to 3 units of electricity consumption per day is noticed for powering the cart. With the introduction of solar charging and storage in gel batteries the vendors will be able to save their electricity expenses significantly. The refrigerant used in the freezer is glycol and continuous power requirement is not needed for the freezer to operate during cloudy days and night time, which makes the project more reliable in adverse weather conditions also.

18. DUTY CYCLE

The system should be capable for operating the freezer for 10 hours and display lights for 3 hours during a sunny day.

19. LOAD

Power rating of freezer : 283 W, 2.53 A max ... Duration : 10 hours (Intermittent)

LED display units :100 W max ...Duration : 3 hours

20. COMPONENTS AND SPECIFICATIONS

The following are the main components used for the setting up of the off grid solar power pack for the push cart:

Mono Crystalline Solar PV Module : 300 W, 24 V/ 12 V :2 Nos

Gel Battery :12 V, 100 Ah :2 Nos

Sine Wave Inverter and MPPT Charge Controller :1 kVA, 24 V/12 V

Support structure for PV modules, cables, AC/DC distribution box and safety accessories.

21.SPV MODULES

21.1 The PV module used should be of mono crystalline silicon and should conform to IEC 61730 "Photovoltaic (PV) Module safety qualification, Part-1 - Requirements for construction & Part-2 Requirements for testing.

21.2 The PV Module should have IEC 61215 Certification (Crystalline silicon terrestrial photovoltaic (PV) modules – Design qualification and type approval)

21.3 The PV module should comply Salt Mist Corrosion Test IEC 61701.

21.4 Shading correction/ bypass diode for optimizing PV out to be incorporated in each solar module or panel level and shading optimization to be provided.

21.5 Each PV module used in any solar power project must use a RF identification tag (RFID), which must contain the following information. The RFID can be inside or outside the module laminate, but must be able to withstand harsh environmental conditions.

- a. Name of the manufacturer of PV Module
- b. Name of the manufacturer of Solar cells
- c. Month and year of the manufacture (separately for solar cells and module)

- d. Country of origin (separately for solar cell and module)
- e. I-V curve for the module
- f. Peak Wattage, I_m , V_m and FF for the module
- g. Unique Serial No. and Model No. of the module
- h. Date and year of obtaining IEC PV module qualification certificate
- i. Name of the test lab issuing IEC certificate
- j. Other relevant information on traceability of solar cells and module as per ISO 9000 series

21.6 The following details should be provided on the module

- a. Name of the manufacturer
- b. Month and year of manufacture
- c. Rated Power at STC
- d. V_{mp} , I_{mp} , V_{oc} , I_{sc}

21.7 The PV modules must qualify (enclose Test Reports/Certificates from IEC/NABL accredited laboratory) as per relevant IEC standard.

21.8 PV modules used in solar power plant/ systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years.

21.9 Original Equipment Manufacturers (OEM) Warranty of the PV Modules shall be submitted by the successful bidder when the materials delivered at site.

21.10 The PV Module should be manufactured indigenously.

22 POWER CONDITIONING UNIT

22.1 Power Conditioning Unit (PCU) shall comprise of charge controller, MPPT unit (Integrated with the inverter or separate), necessary displays, indicators and alarms.

22.2 The control system should continuously adjust the voltage of the generator to optimize the power available. The power conditioner must automatically re-enter standby mode when input power reduces below the standby mode threshold. Front Panel display should provide the status and fault indication (if any)

22.3 The charge controller and MPPT should conform to IEC 60068-2 (1, 2, 14, 30) for environmental testing.

22.4 The charge controller and MPPT should conform to following electrical parameters:

- a. Operational Voltage Range: 12 V / 24 V according to the battery bank and panel array
- b. Controlling element: IGBT/ MOSFET
- c. The Charge controller/MPPT units should conform to IEC 60068-2 (1,2,14,30), if charge controller is not part of the inverter

22.5 Solid State MPPT based series pulse width modulation charger with minimum three stages (bulk, absorb and float)

22.6 Current rating as required for panel array and battery bank

22.7 Digital LED/ LCD display of input SPV voltage and current, battery voltage and current. Separate indication for SPV charging shall also be provided. Battery Charge Level LED Indicator (s) – Low, Medium, High, Full. Battery Low indicator and Alarm/ cut-off.

- a) Output voltage: 230V
- b) Output frequency :50 Hz
- c) THD: Less than (<) 5%
- d) Efficiency: 85% or above at full load.
- e) Ambient temperature: 5 to 55°C
- f) Relative humidity: 90% non-condensing

22.8 Protections:

- a) Short circuit (circuit breaker & electronic protection against sustained fault)
- b) Over-load protection
- c) Under voltage & Over-voltage of Battery
- d) Auto/ Manual re-connects provision
- e) Reverse polarity protection both for the PV array and Battery bank (DC)

22.9 Other Features:

- a) Surge Protection: 150% of the rated capacity for a period of 10 seconds
- b) Acoustic Noise Level \leq 50 dB

22.10 Indicators / Displays / Alarms

- a) Digital Display(s) of input DC SPV voltage & current, along with Energy Meter
- b) Digital Display (s) AC output voltage, frequency, power and current
- c) Digital Display of output AC kWh meter (Daily/ Cumulative)
- d) Overload Alarm / cut-off
- e) System Cut-off Indicator
- f) System Reset Button

23 ELECTRICAL SAFETY AND PROTECTION

- a) Internal Faults: In built protection for internal faults including excess temperature, commutation failure, over load and cooling fan failure (if fitted) is obligatory.
- b) Over Voltage Protection: Protection is to be provided against voltage fluctuations itself and internal faults in the power conditioner, operational errors and switching transients.
- c) Cabling practice: Cable connections must be made using PVC insulated copper cables, as per BIS specifications. All cable connections must be made using suitable terminations for effective contact.
- d) Fast acting semiconductors type current limiting fuses at the main bus-bar to protect from the short circuit contribution.
- e) The inverter shall include an easily accessible emergency OFF button located at an appropriate position on the unit.
- f) All exposed surfaces of ferrous parts shall be thoroughly cleaned, primed and painted or otherwise suitably protected to survive nominal 10 years design life of the unit.
- g) The inverter enclosure shall be weather proof and capable of surviving climatic changes and should keep the inverter intact under all conditions in the room where it will be housed. The inverter shall be located indoor and should be either wall/ pad mounted. Moisture condensation and entry of rodents and insects shall be prevented in the inverter enclosure.

24 INGRESS PROTECTION

All PV equipment should have an ingress protection of at least IP65.

25 BATTERY BANK

25.1 Battery bank comprising of **Gel batteries** conforming to IEC 61427 or applicable BIS standards should be supplied, installed, and commissioned.

25.2 Test certificate submitted should qualify the minimum requirements as per above standards for capacity test, ampere-hour efficiency test, watt-hour efficiency test, self-discharge test.

25.3 The battery bank will have a minimum rating as mentioned under the scope of works

25.4 Battery capacity is rated C/10 at 27°C discharge rate. 80% of the rated capacity of the battery should be between fully charged & load cut-off conditions.

25.5 The following additional information on the batteries to be supplied:

- a) Overcharge voltage
- b) Load disconnect voltage
- c) Modules reconnect voltage
- d) Float voltage
- e) Temperature compensation required for proper operation
- f) Ampere-hour efficiency/ watt-hour efficiency
- g) Self-discharge (less than 3% per month at 30°C)

26 ARRAY SUPPORT STRUCTURE

26.1 The two solar PV modules to be placed on the roof top metal frame of the cart with GI / aluminium frame support structure and hinges in such a way that both modules can be fitted to the roof top to extend sideways during day time and can be tilted downwards during evening time. Damper proof rubber gaskets to be placed properly to minimise vibrations on the PV module mounted on the metal frame. All the nuts, bolts and fasteners used should be of corrosion resistant materials such as stainless steel, brass, etc.

26.2 Structural material shall be corrosion resistant and electrolytically compatible

with the materials used in the module frame, its fasteners, nuts and bolts. Galvanizing should meet ASTM A-123 hot dipped galvanizing or equivalent, which provides sufficient spraying thickness, if steel frame is used. Aluminium frame structures with adequate strength and in accordance with relevant BIS standards can also be used.

26.3 Structures shall be supplied complete with all members to be compatible for allowing easy installation at the site.

26.4 The structures shall be designed to allow easy replacement of any module.

27 AC Plug Points

AC Plug points with switches and fuse to be provided for powering the freezer, LED display and LED bulbs used in the push cart.

28 CONNECTED LOAD

Connected Load to the PV System is a freezer for keeping ice cream, LED display light and LED bulbs.

29 CABLES, SWITCHES AND GENERAL REQUIREMENTS

29.1 PVC insulated copper cables with current rating suitable for AC and DC as per the National Electric Code, and meeting working voltages up to 1100 V and UV resistant for outdoor installation as per IEC 60502/ IS 1554 (Pt. I & II)

29.2 Cable Marking: All cable/wires are to be marked in proper manner by good quality ferule or by other means so that the cable can be easily identified.

29.3 Switches/ circuit breakers/ connectors meeting general requirements and safety measurements as per IS 60947 Part I, II, III and EN 50521 for AC/DC.

30 AC/DC WIRING

Before submitting the tender, the tenderers should visit the beach locations for designing the structural requirements for mounting the solar PV modules, gel battery with enclosure and PCU and protective devices and for assessing length of AC and DC cables.

31 WARRANTY

31.1 5 years comprehensive warranty should be provided by the supplier for the

system and components or part of the system has to be provided as per the special conditions of the contract.

31.2 PV modules used in solar power packs/ systems must be warranted for their output peak watt capacity, which should not be less than 90 % at the end of 10 years

31.3 The Warranty Card to be supplied with the system must contain the details of the system supplied.

31.4 OEM Warranty Certificate PV Modules and Inverters shall be produced along with the supply of the material.

32 TECHNICAL DOCUMENTATION, DRAWING AND INSPECTION

32.1 An Operation, Instruction and Maintenance Manual, in Malayalam should be provided with the system following minimum details must be provided in the manual:

- a. About Photovoltaic
- b. About solar power plant – its components and expected performance.
- c. About PV module
- d. About battery
- e. About electronics
- f. About charging and significance of indicators
- g. DO's and DON'T's
- h. Clear instructions on regular maintenance and troubleshooting of solar power plant
- i. Name and address of the contract person in case of non-functionality of the solar power plant.

33 BILL OF MATERIAL

The bidder should provide the bill of material mentioning the quantity of each of the item consisting in the system, along with the offer. The Bill of Materials should include the following details:

S/N	Item	Make	Model	Quantity	Remarks
-----	------	------	-------	----------	---------

1	Mono crystalline Solar PV Module				Make & Model
2	Off-Grid PCU/Inverter				Make & Model
3.	Gel Battery				
4.	Module Mounting Structure				
5	DC Cables				
6	AC Cables				
7	AC / DC Distribution Box and accessories				

33.1 If suitable Equipment with the above Specifications are not in the Empanelled list of ANERT, tender may be quoted with the suitable equipment (PV Module, Inverter, Battery etc.) as per the specifications above with all necessary certifications described in the respective clauses.

33.2 During the implementation stage of the project, if the successful bidder could not supply the particular Make/Model of Solar Module/Inverter/BOS due to any valid reason, that should be intimated and approval may be sought from ANERT for change of any Make/Model of the above equipment.

34 SITE INSPECTION

It is recommended that the bidders visit all the sites listed here for the physical verification and for correctly estimating the quantity, especially related to structure and cabling, before submitting the bids.

35 DISPLAY BOARD

A Display board of size (Minimum 60cm x 30 cm) with the logo of ANERT and details of the scheme as specified in the work order. The words ‘ Solar Power Pack Installed by ANERT’ should be legibly displayed.

ANNEXURE 1A – SUMMARY OF BID QUALIFICATION REQUIREMENTS

(To be filled in by the bidder)

1.	Name of the bidder	
2.	Address in full	
3.	Contact Details Mobile Land Phone Fax Email	
4.	Name and Designation of the authorised signatory	
5.	Details of EMD submitted along with the bid in favour of CEO ANERT	

Documentary evidence for the bid qualification requirements are submitted along with this document and the details furnished above are true and correct.

Signature
of authorised signatory

Name

Designation

Date:

(office seal)

ANNEXURE 1B-AGREEMENT

ARTICLES OF AGREEMENT executed on this the day of
Two thousand andbetween the **Agency for
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.

WHEREAS in response to the Notification No.
dated the bounden has submitted to ANERT a e-tender for the ***Retender for
the Supply, Installation and Commissioning of 22 Nos of standalone Off-Grid SPV
Power Packs for Push Carts in Kollam and Alappuzha Districts*** specified therein subject
to the terms and conditions contained in the said e-tender.

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 Five days of acceptance of this e-tender,
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

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 1C – DECLARATION BY THE BIDDER

e-Tender Notification No:, dtd for
Retender for the Supply, Installation and Commissioning of 22 Nos of standalone Off-Grid
SPV Power Packs for Push Carts in Kollam and Alappuzha Districts

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 3 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 5 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. Our firm has obtained the certifications from MNRE or NABL approved Test laboratories that the goods and services are satisfying the technical criteria specified in the bid.

Signature

Date

Name

ANNEXURE 1D- DECLARATION ON SUBSIDY CLAIM

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

Tender Notification No.:

Retender for the Supply, Installation and Commissioning of 22 Nos of standalone Off-Grid SPV Power Packs for Push Carts in Kollam and Alappuzha Districts

To
The CEO
ANERT

I hereby declare that we will not apply directly to MNRE for claiming the subsidy for this SPV project withkW capacity and proposed to be installed at

Signature of Bidder:

Name :

Date:

Office Seal

ANNEXURE 1E – DECLARATION OF RELATIONSHIP WITH ANERT EMPLOYEE

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

Tender Notification No.:

Retender for the Supply, Installation and Commissioning of 22 Nos of standalone Off-Grid SPV Power Packs for Push Carts in Kollam and Alappuzha Districts

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 2A -BIDDER'S TECHNICAL INFORMATION SUMMARY

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

1.	Name of the bidder as in registration certificate	
2.	Address in full	
3.	Contact Details Mobile Land Phone Fax No. Email address	
4.	Name of the authorised signatory	
5.	Designation of the authorised signatory	
6.	Whether the bidder is a bonafide manufacturer/integrator of the item tendered?	

7. Details of main components in the systems offered and the test certificates

S/N	Criteria	PV Module	Inverter	Gel Battery
1.	Make offered			
2.	Model offered			
3.	IEC to which complies , as per the test certificate			
4.	Lab from which Test certificate obtained			
5.	Test certificate No.			
6.	Copy of test certificate enclosed at page no. (of this tender submission)			

I have read the General Tender Terms & Conditions for e-Procurement, General Conditions, Special Conditions and Bidder's Technical Information summary of this e-tender 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:

(office seal)