



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/114/2022-PE1(RTS)						
Tender ID	2023_ANERT_556882_2						
Tender Type	Open Tender	Form of contract	Supply and Service				
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	
					.pdf	PQ Documents	
			2	Finance	.xls	Financial Bid	
Tender Fee Details, [Total Fee in ₹ * - 2,950]				EMD Fee Details			
Tender Fee in ₹	2,950			EMD Amount in ₹	50,000	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 Design, Supply, Installation, Testing and Commissioning of 3 Nos of Solar Cold Storage with 5 years warranty in Kerala, India						
Work Description	Design, Supply, Installation, Testing and Commissioning of 3 Nos of Solar Cold Storage with 5 years warranty						
Pre Qualification Details	Please refer Tender documents.						
Independent External Monitor/Remarks	NA						
Tender Value in ₹	55,00,000	Product Category	Solar Power Plants	Sub category	NA		
Contract Type	Tender	Bid Validity(Days)	90	Period Of Work(Days)	45		
Location	Kerala, India	Pincode	671001	Pre Bid Meeting Place	NA		
Pre Bid Meeting Address	NA	Pre Bid Meeting Date	NA	Bid Opening Place	Onlin		
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	348.61
Work Item Documents	S.No	Document Type	Document Name	Description
	1	Tender Documents	ReTD.pdf	Tender Document
	2	BOQ	BOQ_839146.xls	Financial Bid
				607.38
				319.00

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 Design, Supply, Installation,
Testing and Commissioning of 3 Nos of Solar Cold
Storage with 5 years warranty in Kerala, India*

Ref. No.: ANERT-TECH/114/2022-PE1(RTS)

PART – 1: GENERAL CONDITIONS

Date of Publishing of Bids : - 22/03/2023

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

CONTENTS

E-TENDER NOTICE.....	1
TENDER ABSTRACT	2
GENERAL TERMS AND CONDITIONS FOR E-PROCUREMENT	3
1. ONLINE BIDDER REGISTRATION PROCESS:.....	3
2. ONLINE TENDER PROCESS:.....	3
3. DOCUMENTS COMPRISING BID:	4
4. TENDER DOCUMENT FEES AND EARNEST MONEY DEPOSIT (EMD)	5
5. SUBMISSION PROCESS:.....	8
6. VALIDITY	8
7. DEVIATIONS.....	8
8. BLACK LIST	8
9. BIDDER'S LOCATION	9
10. CORRUPT AND FRAUDULENT PRACTICES.....	9
11. CONFLICT OF INTEREST.....	9
12. CONFIDENTIALITY.....	10
13. APPLICABLE LAW.....	11
14. AMENDMENT OF TENDER DOCUMENT.....	11
15. COMMENCEMENT OF WORKS.....	11
16. GOVERNMENT OF KERALA – CORRUPT AND FRAUDULENT PRACTICES	11
17. BID QUALIFICATION REQUIREMENTS.....	12
18. GENERAL CONDITIONS.....	15
19. SPECIAL CONDITIONS.....	20
20. INVITATION TO BID	23
21. DEFINITION OF SYSTEM AND PARAMETERS.....	23
21.1 Cold Room.....	24
21.2 Solar Photovoltaic System.....	24
21.3 Solar Controller	24
21.4 Refrigeration System	25
21.5 Thermal Energy Storage (TES) System	25
21.6 Solar System and Electric Battery System for Auxiliary Components	25
22 SCHEDULE OF SUPPLY	25

23 SCOPE OF WORK.....	26
24 SELECTION PROCEDURE.....	28
25 PERFORMANCE SECURITY.....	28
26 PAYMENT.....	29
27 SERVICE AND MAINTENANCE.....	30
28. TECHNICAL SPECIFICATIONS.....	33
29. TESTING AND INSPECTION.....	39
30. WARRANTY.....	40
31. OPERATION MANUAL.....	40
32. DISPLAY BOARD.....	40
33. INSURANCE.....	41
34. STANDARDS.....	41
35 ENGINEERING DRAWINGS.....	41
36 PACKING.....	42
37 FACTORY INSPECTION AND TESTS.....	42
FORMAT FOR COVERING LETTER.....	43
ANNEXURE A – SUMMARY OF BID QUALIFICATION REQUIREMENTS.....	44
ANNEXURE B - AGREEMENT.....	46
ANNEXURE C – DECLARATION BY THE BIDDER.....	48
ANNEXURE D – DECLARATION OF RELATIONSHIP WITH ANERT EMPLOYEE.....	49
FORMAT A – UNDERTAKING FOR NO BLACKLISTING & NO BANNING.....	50
FORMAT B – CERTIFICATE OF BIDDER’S FINANCIAL QUALIFICATION.....	51
FORMAT C – COMPONENT.....	52

E-TENDER NOTICE

Competitive e-tenders in two cover system with Earnest Money Deposit (EMD) and Price Bid in accordance with the technical specifications are invited from reputed Manufacturers / System Integrators with relevant experience for the ***Retender for the Design, Supply, Installation, Testing and Commissioning of 3 Nos of Solar Cold Storage with 5 years warranty in Kerala, India.*** 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

CEO

22/03/2023

TENDER ABSTRACT

Ref. No.	ANERT-TECH/114/2022-PE1(RTS)
Name of Work	Retender for the Design, Supply, Installation, Testing and Commissioning of 3 Nos of Solar Cold Storage with 5 years warranty in Kerala, India
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 @ 3.30 PM
Estimated Cost	Rs. 55,00,000/-
Cost of Tender form	Rs. 2,950/- (Including GST)
EMD	Rs. 50,000
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 Law College Road, Vikas Bhavan. PO, Thiruvananthapuram - 695 033, Kerala

Thiruvananthapuram
22/03/2022

Sd/-
CEO

GENERAL TERMS AND CONDITIONS FOR E-PROCUREMENT

This e-Tender is being published for the Retender for the Design, Supply, Installation, Testing and Commissioning of 3 Nos of Solar Cold Storage with 5 years warranty in Kerala, India. 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 (a) The First Stage - Part-I Pre- Qualification cum Technical Bid with Commercial terms without Price Bid

Technical proposal shall contain the scanned copies of the following documents which every bidder has to upload:

Envelop -1 shall contain, Part-I (this document in PDF form)/scanned copies of:

- i. Tender documents downloaded (signed with office seal)
- ii. Summary of Bid qualification requirement (Annexure A)
- iii. Agreement in the prescribed format (Annexure B) on Govt. of Kerala stamp paper worth Rs.200/-
- iv. Copy of Registration Certificate of the bidder firm
- v. Copy of GST Certificate

- vi. Copy of PAN card
- vii. Documents to prove the annual Turnover of the bidder along with a certificate from Chartered Accountant regarding net worth. (Capital + Reserves)
- viii. Copy of the work orders and certification from the purchase regarding execution of the order, to prove the experience in executing similar orders, as specified
- ix. Bill of Material
- x. Details of the technical offer, including test certificates issued in the name of the bidder
- xi. Declaration by the bidder (format as in Annexure – C)
- xii. Declaration of relationship with ANERT employee (format as in Annexure - D)

3.1 (b) The Second Stage (Financial Cover as per two cover system):

Envelop -2: shall contain 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.

- 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 fee of Rs. 2,950/- and Earnest Money Deposit or Bid Security of Rs. 50,000. The Bid security is required to protect

the purchaser against risk of Bidder's conduct, which would warrant the forfeiture of security.

4.2 Bidders who are registered as or under MSME / MSE / NSIC / Udhog Aadhar OR Central/State PSE are exempted from paying EMD and Tender Fee.

4.3 Online Payment modes: The tender document fees can be paid in through e-Payment facility provided by the e-Procurement system. Bidders can make payment only via Internet banking facility

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

A) Internet Banking Options (Retail)			
1	Allahabad Bank	32	Kotak Mahindra Bank
2	Axis Bank	33	Lakshmi Vilas Bank
3	Andhra Bank	34	Mehsana Urban Co-op Bank
4	Bandan Bank	35	NKGSB Co-operative Bank
5	Bank of Bahrain and Kuwait	36	Oriental Bank of Commerce
6	Bank of Baroda	37	Punjab and Maharashtra Cooperative Bank
7	Bank of India	38	Punjab National Bank
8	Bank of Maharashtra	39	Punjab and Sind Bank
9	Bassein Catholic Co-operative Bank	40	RBL Bank
10	BNP Paribas	41	Saraswat Cooperative Bank
11	Canara Bank	42	ShamraoVithal Cooperative Bank
12	Catholic Syrian Bank	43	South Indian Bank
13	Central Bank of India	44	Standard Chartered Bank
14	City Union Bank	45	State Bank of India
15	Corporation Bank	46	Syndicate Bank
16	Cosmos Bank	47	Tamilnad Mercantile Bank
17	DCB Bank	48	Tamilnadu Cooperative Bank
18	Dena Bank	49	The Kalyan Janata Sahakari Bank
19	Deutsche Bank	50	TJSB Bank
20	Dhanalaxmi Bank	51	UCO Bank
21	Federal Bank	52	Union Bank of India
22	HDFC Bank	53	United Bank of India
23	ICICI Bank	54	Vijaya Bank
24	IDBI Bank	55	YES Bank
25	Indian Bank		

26	Indian Overseas Bank		
27	IndusInd Bank		
28	Jammu & Kashmir Bank		
29	Janata Sahakari Bank		
30	Karnataka Bank		
31	Karur Vysya Bank		
B) Internet Banking Options (Corporate)			
1	Bank of Baroda	21	Laxmi Vilas Bank
2	Bank of India	22	Oriental Bank of Commerce
3	Bank of Maharashtra	23	Punjab & Maharashtra Coop Bank
4	BNP Paribas	24	Punjab & Sind Bank
5	Canara Bank	25	Punjab National Bank
6	Catholic Syrian Bank	26	RBL Bank
7	City Union Bank	27	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 3 months from the date of opening of offers. The offers with lower validity period are liable for rejection. 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.

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 service Provider(s) is required to provide professional, objective, and impartial services, at all times holding ANERT's interests paramount, strictly avoiding conflicts with other assignments or its own corporate interests, and acting without any consideration for future work. The supplier has an obligation to disclose to ANERT any situation of actual or potential conflict that impacts its capacity to serve the best interest of ANERT. Failure to disclose such situations may lead to the disqualification of the supplier or the termination of its Contract and/or sanctions by the Government.
- ii. Relationship with the ANERT staff: a service Provider (including its subsidiaries /partners) that has a close business or family relationship with a professional staff of the ANERT who are directly or indirectly involved in any part of the preparation of the Terms of Reference for the assignment, the selection process for the Contract, or the supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable

to ANERT throughout the selection process and the execution of the Contract. Any other types of conflicting relationships as indicated in the TENDER

12. CONFIDENTIALITY

- i. From the time the Proposals are opened to the time the Contract is awarded, the agency (ies) should not contact any of the officials of ANERT on any matter related to its Technical and/or Financial Proposal. Information relating to the evaluation of Proposals and award recommendations shall not be disclosed to the agency (ies) who submitted the Proposals or to any other party not officially concerned with the process, until the publication of the Contract award information.
- ii. Any attempt by the agency (ies) or anyone on behalf of the Suppliers to influence improperly ANERT in the evaluation of the Proposals or Contract award decisions may result in the rejection of its Proposal and may be subject to the application of prevailing Government sanctions procedures.
- iii. Notwithstanding the above provisions, from the time of the Proposals" opening to the time of Contract award publication, if a agency (ies) intends to contact ANERT on any matter related to the selection process, it should do so only in writing.
- iv. 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 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 tender, ANERT may for any reason, modify the tender document. The amendment document/ corrigendum shall be notified through the website www.etenders.kerala.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 competition, economy and efficiency, transparency, and fairness. ANERT requires the agency (ies) to observe the following Government manuals (amended from time-to-time) during the selection process and in execution of such contracts The Kerala Financial Code (KFC), 2008 (7th Edition, 1st Edition was in 1963), The Stores Purchase Manual (SPM), 2013.

BID QUALIFICATION REQUIREMENTS

17. BID QUALIFICATION REQUIREMENTS

- 17.1 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.
- 17.2 An agreement in Rs.200/- Kerala stamp paper as per the format given in Annexure B must be submitted along with e-tender document.
- 17.3 Bidder should have cumulative experience of executing contracts of supply of at least 4 nos. of Solar Cold Storage System/Augmentation of conventional cold storage system to solar energy based to any SNA / Govt. Organization / PSU/co-operative or Society/any private organizations in the last Five years ending up to date of publish of this tender.
- 17.4 The products offered by the bidder should confirm to the technical specifications given in the tender. The necessary test certificate of the solar cold storage unit issued from MNRE/NABL/BIS accredited laboratory to be submitted along with the bid. The test certificate should be in the name of the bidder. *In case, the test certificate is not available at the time of bidding, documentation pertaining to availing the same i.e Test Acknowledgement copy etc should be furnished along with the bid. In that case, the bidder shall have to submit the valid test report at the time of award of work.*
- 17.5 The bidder should have service centre/authorised service providers in Palakkad & Kozhikode district of Kerala. Detailed list with address, contact details and proof has to be submitted. If the bidder does not have such facility at the time of tendering, an undertaking 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.
- 17.6 The bidder's company/firm must not have been debarred / blacklisted by any Govt. Dept., agency, PSUs / institution / agencies / autonomous organisations.

The bidder shall submit a self-certification by an authorized person duly notarized to this effect.

17.7 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.

17.2 Eligibility Requirement

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

S. No.	Criteria	Documents Required
1.1	The Bidder should have any of the following legal status: a) Body incorporated in India under the Companies Act, 2013 including any amendment thereto; OR b) Body incorporated in India under the Limited Liability Partnership (LLP) Act, 2008 including any amendment thereto; OR c) Firm registered under Partnership Act, 1932 in India; OR d) Sole Proprietor In case of JV, all the members must fulfil this requirement and submit the documents as per the Tender Document.	a) In case of Company – Copy of Registration/ Incorporation Certificate b) In case of LLP – Copy of Deed of Partnership c) In case of Partnership – Copy of Deed of Partnership d) 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	Bidder should have cumulative experience of executing contracts of supply of at least 4 nos. of Solar Cold Storage System/Augmentation of conventional cold storage system to solar energy based to any SNA / Govt. Organization / PSU/co-operative or Society/any private organizations in the last Five years	Statutory Documents substantiating this requirement along with Documents submitted in Clause 1.4 of this Section above.

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 as per the format provided as Format A.
-----	--	---

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 should have cumulative experience of executing contracts of supply of at least 4 nos. of Solar Cold Storage System/Augmentation of conventional cold storage system to solar energy based to any SNA / Govt. Organization / PSU/co-operative or Society/any private organizations in the last Five years	The details of projects executed during period mentioned above should be listed. Copy of work orders and a certificate issued by the SNA/ Govt. Organization / SECI / PSUs 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.	The Bidder should have positive net worth in at least 2 years out of the last five Financial Years (FY 15-16, FY 16-17, FY17-18, FY18-19 & FY19-20).	1. Certificate fulfilling required financial criteria in the name of Bidder duly certified by Practicing Chartered Accountant as per the format provided Format B, duly mentioning UDIN
1.2.2.	Minimum Average Annual Turnover (MAAT) during any 2 best out of last five financial years (FY16-17, FY17-18, FY18-19, FY19-20, and FY20-21) of the bidder shall not be less than 1 Cr.	2. Firm’s Annual Audit Report, Balance sheet, Profit & Loss and Income Tax Returns / CA certificate for last Five years i.e., FY: FY16-17, FY17-18, FY18-19, FY19-20, and FY20-21

CONDITIONS OF CONTRACT

18. GENERAL CONDITIONS

- 18.1 The tenders should be submitted online at www.etenders.kerala.gov.in
- 18.2 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.
- 18.3 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.
- 18.4 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.
- 18.5 Tenders subject to conditions will not be considered. They are liable to be rejected on that sole ground.
- 18.6 Every tenderer should send along with his tender an Earnest Money Deposit. This may be paid online at the e-tenders website.
- 18.7 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.
- 18.8 The final acceptance/rejection of the tenders rests entirely with CEO, ANERT who do not bind themselves to accept the lowest or any tender.
- 18.9 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 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 MSE's 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.
- 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.
- d) 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.

18.10 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.

- 18.11 (a) All payments to the contractors will be made by ANERT in due course
(b) All incidental expenses incurred by ANERT for making payments outside the State in which the claim arises shall be borne by the contractor.
- 18.12 Payments will be made only after the supply, Installation and Commissioning of the items and certification by the competent Technical personnel of ANERT.
- 18.13 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.
- 18.14 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.

18.15 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.

18.16 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.

- 18.17 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.
- 18.18 The tenderer shall undertake the installation and commissioning of the system according to the standards and specification.
- 18.19 No representation for enhancement of rate once accepted will be considered.
- 18.20 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.
- 18.21 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.
- 18.22 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 B to this tender. Tenders without the agreement in stamped paper will be rejected outright.
- 18.23 **Conditions in the technical document, technical specifications and special conditions of this tender document would override these general conditions, wherever applicable.**
- 18.24 ANERT, by notice sent to the Supplier, may terminate the contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for ANERT's convenience, the extent to which performance of the Supplier under the contract is terminated, and the date upon which such termination becomes effective.
- 18.25 E-tender shall be opened at the time and date announced in the tender notice, and the price bid will be evaluated on the same day.

- 18.26 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.
- 18.27 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

- 19.1 Each bidder should submit only one (1) bid. Any bidder who `submits/participates in more than one bid for the work shall be disqualified.
- 19.2 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.
- 19.3 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.
- 19.4 **During the tender evaluation, ANERT may seek more clarifications/details from any or all of the tenderers, if felt necessary.**
- 19.5 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.
- 19.6 **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.**
- 19.7 **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, fee for approval if any, GST and all other expenses.**
- 19.8 **The price quotes should be inclusive of initial cost of supply, installation and commissioning, support during the warranty period of 5-years.**

- 19.9 The tender offer shall be kept valid for acceptance for a period of 3 months from the date of opening of bid. The offers with lower validity period are liable for rejection.
- 19.10 The evaluation of the price bid will be based on the grand total of all-inclusive amount quoted excluding GST.



**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 Design, Supply, Installation, Testing
and Commissioning of 3 Nos of Solar Cold Storage with
5 years warranty in Kerala, India*

Ref. No.: ANERT-TECH/114/2022-PE1(RTS)

PART – 2: SCOPE OF WORKS

Date of Publishing of Bids : - 22/03/2023

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

SCOPE

20. INVITATION TO BID

- 20.1 **ANERT is the State Agency for Renewable Energy in Kerala** having its Headquarters at Thiruvananthapuram, Kerala and various district level offices.
- 20.2 In order to meet the requirements, ANERT proposes to invite bids from Manufacturers / System Integrators of Solar Powered Cold Storage and provide services as per details/**scope of work** mentioned in this tender document.
- 20.3 Bidder shall mean any entity (i.e. juristic person) who meets the **eligibility criteria** of this tender and willing to provide the Services as required in this bidding document. The interested Bidders who agree to all the terms and conditions contained in this document may submit their Bids with the information desired in this bidding document.
- 20.4 Address for submission of Bids, contact details including email address for sending communications are given in this tender document.
- 20.5 This document shall not be transferred, reproduced or otherwise used for purpose other than for which it is specifically issued.
- 20.6 Interested Bidders are advised to go through the entire document before submission of Bids to avoid any chance of elimination. The eligible Bidders desirous of providing services to ANERT are invited to submit their technical proposal in response to this tender. The criteria and the actual process of evaluation of the responses to this tender and the selection of Bidder will be entirely at ANERT's discretion. This tender seeks proposal from Bidders who have the necessary experience, capability & expertise to provide ANERT the proposed Services adhering to its requirements outlined in this tender.

21. DEFINITION OF SYSTEM AND PARAMETERS

The solar cold storage enables effective use of solar energy for cooling of fruits/vegetables/medicines/other perishable items so as to store and preserve them for longer duration. The cold storage unit in off- grid operation, primarily runs on power generated from Solar Photovoltaic and can be switched to grid/DG during cloudy days, if reqd. During sunshine hours the electricity generated from solar photovoltaic is used to provide cooling through a vapor compression refrigeration cycle to cool a cold room as

well as store cooling energy in a Thermal Energy Storage (TES) System. In Thermal Energy Storage (TES) system the cold energy is stored in phase change material such as water or water salt eutectic mixture and transferred to the cold storage unit depending on the usage needs. During non-solar hours, the cooling needs of cold storage unit are met through the stored cooling in the thermal energy storage system. Use of solar photovoltaic and thermal energy storage backup eliminates dependency on grid and need of diesel generator as a backup device.

The system mainly comprises of the following components and equipment:

Cold Room, SPV System, Solar Controller, Refrigeration System, Thermal Energy Storage (TES) System, Batteries for Auxiliary Load.

21.1 Cold Room

The cold room is a PUF insulated room that maintains desired temperature and humidity for storage of commodities. The cold room is equipped with refrigeration unit which provides necessary cooling by circulating cold air to the commodities for preservation.

21.2 Solar Photovoltaic System

The SPV system generates electrical powers during sunshine hours which is used to operate the cold storage system. It provided electricity for running refrigeration system and auxiliary load. The SPV system shall have following specifications: •

21.3 Solar Controller

The controller converts the DC power (DC voltage & Current) of the PV array into a controlled high or low DC voltage power, or converts this DC power into single -phase or multi-phase alternating-current power (voltage or alternating current) suitably for driving the refrigeration system.

NOTE — The Controller may also include equipment for MPPT, monitoring, metering and sine wave filters.

21.4 Refrigeration System

Refrigeration system consisting of condensing unit and evaporating unit working on vapor compression cycle. The condensing unit generates cooling energy which can be used for charging the thermal energy storage system and to provide cooling to the cold storage depending upon design of Solar Cold Storage system.

21.5 Thermal Energy Storage (TES) System

In Thermal Energy Storage (TES) system the cold energy is stored in phase change material such as water or water salt eutectic mixture and transferred to the cold storage unit depending on the usage needs. During non-solar hours, the cooling needs of cold storage unit are met through the stored cooling in the Thermal Energy Storage (TES) system.

21.6 Solar System and Electric Battery System for Auxiliary Components

The auxiliary power system consists of following equipment - solar photovoltaic system, MPPT based inverter/ MPPT charge controller, chemical batteries. These are meant to provide electricity for auxiliary electrical loads such as fans of evaporator unit, thermal energy storage control panel, temperature controller unit, lighting, and data monitoring system.

22 SCHEDULE OF SUPPLY

22.1 The items should be delivered and installed at the sites given below for which work order shall be given and specified by ANERT, under prior intimation and supervision of ANERT. The work order for both sites can be awarded individually or by combining both of them.

#	Site	Capacity (MT)
1	Vegetable Market, Velanthavalam, Palakkad	8
2	Vegetable Market, Palakkad	8
3	Medical College Hospital, Kozhikode	5

22.2 The successful bidder should complete the Supply, Installation, Testing and Commissioning of the whole system within 60 days from the date of issue of work order.

22.3 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

22.4 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.

23 SCOPE OF WORK

The broad scope of the work includes Design, Supply, Installation, Testing & Commissioning of Solar Cold Storage unit including five years Comprehensive Maintenance Contract (CMC) of the following capacities;

#	Site	Capacity (MT)
1	Vegetable Market, Velanthavalam, Palakkad	8
2	Vegetable Market, Palakkad	8
3	Medical College Hospital, Kozhikode	5

The detailed scope of this work is as under:

A. Design

- i. The bidder will design the system as per the requirements given in the subsequent technical specification section.
- ii. The solar based cold storage unit must have a valid test certificate in the name of the bidder from MNRE/ NABL accredited test laboratory.
- iii. Adequate Protection must be provided as per the requirement of the site by taking lightening and other climatic conditions etc.

B. Installation and commissioning

- i. The successful bidder will transport the system to the site, install and commission it on the field of beneficiaries given in clause #23
- ii. Before submission of the Bid, Bidders in their own interest are to visit the sites. No
- iii. After completion of installation work, each unit have to be tested and

commissioned in presence of the District Engineer, ANERT of the respective District.

- iv. A display board (size preferably 3ft X 3ft) to be provided at the prominent place. The design and content to be provided at time of issuing work order.

C. *Maintenance services*

- i. The successful bidder is required to undertake scheduled maintenance as well as corrective maintenance for a period of 5 years (Five years) starting from the date of commissioning of the project.
- ii. To ensure proper maintenance of the installed systems, the bidder is required to appoint a technically qualified person to look after maintenance and upkeep of the plant/System. Sufficient spare should also be kept with the service personnel so as to attend to any breakdown forthwith.
- iii. The cold room will be equipped with a remote monitoring system for monitoring its performance which will feed into the maintenance service of unit
- iv. The date of commencement of warranty shall be reckoned from the date of commissioning of the system.
- v. The bidder is also required to undertake on-call maintenance as and when required upon receipt of service request from ANERT.
- vi. The bidder must adhere to maintenance procedure by ANERT from time to time.
- vii. The bidder if required should agree to undertake extended maintenance services beyond 5 years on mutually agreed terms and conditions.
- viii. Following service request intimated by ANERT, the system must be made functional within 7 days. System downtime beyond 7 days will result in poor performance score of the vendor which might affect their chances of further bidding in the ANERT tenders or blacklisting of the firm.
- ix. The successful bidder should have a local office / Service Centre in Palakkad & Kozhikode Dist. and any other place to be intimated later so as to deliver uninterrupted and sustainable maintenance services and share its contact details with all concerned.

D. Training

- i. The successful bidder shall have to organize training programme for the beneficiaries for operation and maintenance of the unit. The training shall be a mix of audio and video modules.
- ii. A list of DOs and DON'Ts shall be prepared and displayed at a prominent place at the site along with warning signs wherever necessary
- iii. The beneficiary shall be equipped with copies of a pictorial (for easy understanding) operation manual in English and Malayalam (Regional Language)

24 SELECTION PROCEDURE

ANERT will evaluate all the proposals to determine whether these are complete in all respects as specified in the tender document. Evaluation of the proposals shall be done in three stages as:

24.1 Level - I (Technical Evaluation):

ANERT shall evaluate the technical bid(s) to determine whether these qualify the essential eligibility criteria, whether the bidder has submitted the EMD whether any computational errors have been made, whether all the documents have been properly signed & stamped, whether all the documents as mentioned / or required to submitted with technical bid are submitted and whether bids are completed and generally in order. A detailed proposal to be submitted as part of the bid including proper site survey details.

After evaluation of technical bid(s), a list of the qualifying bidder(s) shall be made. Short-listed bidder(s) shall be informed of the date, time and place of opening of financial bid(s) (online).

24.2 Level - II (Allocation of works)

- i. The financial bids of all the technically qualified bidders will be opened and shall be evaluated. The work will be awarded to the lowest bidder complying

25 PERFORMANCE SECURITY

The successful bidder has to remit an amount @ 3% of the total amount quoted by them as performance security deposit in terms of Bank Guarantee/Deposit having validity

for 6 months from the date of agreement. The bank guarantee/deposit will be released/refunded to the successful bidder after completion of the contract period after deducting the penalties if any.

26 PAYMENT

26.1 No advance payment will be given. All the documents submitted should be certified by the concerned District Office of ANERT. This will be applicable for works issued through individual work order for installations done through Plan and Deposit work scheme of ANERT.

26.2 The terms of payment shall be:

- i. 2.5 % of the invoice amount shall be charged by ANERT as non-refundable license fee and the remaining amount shall be treated as contract value for further payment.
- ii. Upon delivery of materials at the site, 60 % of the contract value will be released as first part payment, if requested. The supplier shall submit the invoice for the materials (including serial numbers and delivery chalan) duly certified by the concerned District Office along with a report regarding the supply of materials.
- iii. On commissioning of the system, 30% of the contract value will be released. All documents related to the completion of the work including commissioning report and commissioning certificate shall be submitted for the release of the amount. The supplier shall submit the invoice for the materials supplied and all documents related including the Project Completion Report to the completion of the work certified by the district office shall be submitted for the release of the amount.
- iv. The remaining 10% shall be retained as performance security and will be released as given below. This period will be considered only from the date of commissioning.
 - a. 30% of performance security shall be paid after one year on request along with the preventive maintenance reports.
 - b. 30% of performance security shall be paid after one year on request along with the preventive maintenance reports.

- c. The remaining 40% shall be paid after the five-year warranty period on request along with the preventive maintenance reports for the 5 years.
- v. The security deposit of 3% furnished along with the contract agreement shall be released on successful completion of supply, installation and commissioning.

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

27 SERVICE AND MAINTENANCE

- 27.1 The faulty system or components should be replaced/ repaired within 7 days of fault reporting. The servicing should be carried out at the site of installation.
- 27.2 The service personnel should visit the installations at least once in 4 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.**
- 27.3 Any 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.
- 27.4 A designated contact Telephone Number and address should be submitted for reporting faults during the warranty period.

28. TECHNICAL SPECIFICATIONS

Specifications	(8 MT)	(5 MT)
Type	Pre-painted Modular Container	
External dimensions in feet	28 feet x 8 feet x 10 feet	20 feet x 8 feet x 10 feet
Internal capacity	1200 ft ³	750 ft ³
Storage capacity	Minimum 10 MT (As per MIDH standards of 120 CFT / 1 MT)	
Temperature Range, °C	4 - 12 °C (Setpoint control available to user)	
Cooling Storage Capacity	Not less than 200MJ (equivalent 2,000 kg of pre-cooling)	
No. of chambers	2	1
Product incoming temperature	as per location climatic average temperature - Max 30%	
Pull down desired time	18 hours	
Thermal Insulation Specifications		
Wall and ceiling insulation & thickness	Minimum 100 mm Polyurethane Foam with density of 40+/-2 kg/m ³ and 0.5mm PPGI sheet on the inner side	
Floor insulation and thickness	Minimum 80 mm Polyurethane Foam with density of 40+/-2 kg/m ³ + 1mm Anti-skid aluminum plate	
Door type	<ul style="list-style-type: none"> • Minimum Opening of 6 feet Height x 2.5 feet Width • 100mm Poly Urethane Foam as per BIS standards use for selecting insulations. • The selection of design parameters based on (IS 661:2000) and method of application of thermal insulation (IS 661 & 13205) 	
Door curtain	PVC curtain before the door to reduce Heat infiltration on door opening	
Product stacking details	On racks (not in supplier scope)	
Ambient temperature	35 °C; <i>Note: Based on the prevailing climate zone temperature</i>	
Designed solar radiation levels	5 kWh/m ² -day global horizontal irradiance <i>Note: Please calibrate the equipment based on respective location irradiance</i>	
Back up duration	24-30 hours (non-door opening & 5 kWh/m ² -day global horizontal irradiance) with room set to 4oC with no pre-cooling and door opening with fully charged battery an thermal storage	

Specifications	(8 MT)	(5 MT)
Power Source		
Photovoltaic panels type	Polycrystalline/Monocrystalline	
Size	Min 8 kWp	Min 6 kWp
Solar VFD drive	As per motor drive and should have P.F not less than 0.95 *P. F - Power Factor	
Solar charge controller	Maximum Power Point Tracking	
Electrical Batteries (Auxiliary Power)	As per auxiliary load requirement for mentioned autonomy. (Auxiliary loads such as fans, lights, valves & control system). The Lithium Ferro Phosphate Batteries should be used.	
Battery Capacity	Min 3,600 VAH	
Array Structure		
Mounting Structure	The mounting structure should be designed over the roof area of cold storage or super structure should be designed.	
Make & Property	<ul style="list-style-type: none"> • Hot dip galvanized MS mounting structures may be used for mounting the modules / panels / arrays. Minimum thickness of galvanization should be at least 80 microns or greater. • Each structure should have angle of inclination of minimum 12 to 15degree as per the site conditions to take maximum insolation. • Structure should withstand the speed for the wind zone with min (wind speed of 150 km/ hour). • The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall comply of latest IS 4759 • Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts. • The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m² • The minimum clearance of the structure from the roof level should be 300 mm. 	
Alternative Power input facility	Grid & DG. 3-ph grid	
Refrigeration System		
Condensing unit	Condensing unit for -5°C evaporating and 40°C condensing temperatures	

Specifications	(8 MT)	(5 MT)
Evaporator unit	Minimum 2 Nos. of Fans and minimum air through of 750CFM each	
Refrigerant	<ul style="list-style-type: none"> Heat transfer medium should be eco-friendly, safety, and energy efficiency and should have minimum Ozone depletion potential. R407F / R134A or any other with Zero ODP and GWP <2000 	
Charging duration	5 to 7 hrs. (ambient temperature dependent)	
Compressor Unit	2.5 TR for 5 MT & 3.6TR for 8 MT at -5oC and 40oC condensing temperature	
Thermal Storage System		
Thermal storage medium	Storage medium should be economical and energy efficient. For example: Phase change materials, Polyalkylene glycol etc. Water / other	
Heat transfer medium from thermal storage to the evaporator unit of cold storage	Heat transfer medium should be eco-friendly, safety, and energy efficiency and should have minimum Ozone depletion potential	
Thermal storage capacity indication	Linear with minimum 4 graduations between maximum and minimum thermal cooling capacity	
Self-leakage from thermal storage	Maximum 300 Watt at the ambient temperature of 40 °C also please calibrate with local environment temperature	
Thermal storage configuration	<ul style="list-style-type: none"> Completely stops providing cooling in the cold storage when temperature of cold storage is achieved to the desired levels. Configuration should be automated while considering IoT, and or Sensor or innovative techniques. 	
Maintenance	Should have IOT Enabled Predictive Maintenance	
External humidification for 90 to 95 % RH	Fogger type external humidification system with 2 to 10-micron particles with automatic regulation	
Air Purger	Manual air purger (It is desirable to remove air and other non-condensable gases from the refrigeration circuit to)	
RH control	RH indicator & controller	
PLC/Microcontroller systems	For overall control of various parameters	
Lighting in Storage, outside and other areas	<ul style="list-style-type: none"> Typical installations for lights may be 2 to 3 W / m2 of floor area as per (IS 15111) A central switch should be provided outside each chamber 	

Specifications	(8 MT)	(5 MT)
Power and control cabling, earthing etc for various electrical circuits	Copper conductors for main power lines for various electrical circuits & equipment lines & copper conductors for lighting, control wiring etc.	
Safety Measures		
Fire protection	Dry fire extinguisher. Lightning arrestors for the building as per local regulations	
Emergency alarm system	To be provided with switches near all cold store doors and alarms located in common public areas	
Installation and commissioning	The storage plant shall be installed, tested & commissioned as per IS 660 / ASHRAE. Std 15.	

28.1 Cold Storage

The cold storage shall be configured in mild steel body of minimum 0.5 mm thickness. One option would be ISO Marine grade container. The use of all welded mild steel body will allow longer life in outdoor environment and no seepage of water inside the cold storage. The sealing of external body is to be done through Silicone sealant. Door seals are permitted with rubber gaskets. Appropriate concrete foundation is to be provided as a base for the cold storage system. The entire cold storage system needs to be grouted in concrete foundation through appropriate fasteners.

28.2 PV Array

The Solar photovoltaics system capacity shall be minimum 8 kWp for 8 MT and 6 kWp for 5 MT system. The solar photovoltaic array shall have following specifications:

- a) Crystalline silicon cell PV modules of capacity 500Wp or higher.
- b) The PV module have IEC 61215 qualification certification for solar PV modules.
- c) The PV module conforms to IEC 61730 Part-1 requirements for construction & Part-2 requirements for testing for safety qualification.
- d) The PV modules qualifies relevant IEC standard.
- e) The PV modules used in solar power plants/ systems are warranted for their output peak watt capacity, which is not less than 90% at the end of 10 years and 80% at the end of 25 years.

28.3 Mounting Structures

The PV modules are mounted on metallic structures of adequate strength and appropriate design, which can withstand load of modules and high wind velocities up to 150 km per hour. The support structure used is to be made of hot dip galvanized iron with minimum 80-micron thickness. The PV system can be installed upon the mounting structure at tilt angle as per latitude or as per the requirement of the system. The PV system shall be mounted over the cold storage body to reduce direct solar radiation over cold storage and to maximize space utilization. In case of shay region, the PV modules may be mounted of any of the rooftop of the available buildings as instructed by the ANERT personnel. The mounting structure design should be approved and duly certified by a chartered engineer certifying its wind sustainability capacity.

28.4 Refrigeration Unit

Refrigeration system consisting of condensing unit and evaporating unit working on HFC refrigerants with zero Ozone Depletion potential. The refrigeration system shall generate minimum of 200 MJ of cooling capacity in a day with 5 kWh/m²-day of global tilted solar irradiance and ambient temperature of 40⁰ C. The generated cooling capacity will be utilized for charging the thermal energy storage system through charging loop.

Once the desired temperature is achieved inside cold room, temperature variation within the air of cold room should not be more than +/- 1 °C at any location inside the cold storage. Datasheet of the compressor from the manufacturer is required to ascertain its rated capacity.

The following details should be marked indelibly on the compressor

- a) Name of the Manufacturer or Distinctive Logo.
- b) Model Number
- c) Serial Number
- d) Rated Capacity

28.5 Solar Controller for Powering Condensing Unit

The solar photovoltaic system shall run the compressor and fan of the condensing unit using variable frequency drive. Manual changeover system is required to switch the

power source between solar photovoltaic and 3-phase grid electricity.

28.6 Thermal Storage System

There should be a provision to store cooling in a thermal storage system to provide cooling during the off-sunshine period and store excess solar energy in case it is not utilized. The charging and discharging of the thermal storage shall occur simultaneously. Energy storage medium should be phase change material (PCM) such as water or water salt eutectic mixture. The purpose of using phase change material is that it has longer life than electrical batteries to store energy.

In case of the use of water salt eutectic mixture, the useful life of phase change material shall be minimum 10 years to minimize long term expenditure associated with PCM replacement, and it should be non-toxic for usage with food commodities. The supplier shall provide Material safety data sheet and life cycle test report from the original equipment manufacturer of water salt eutectic mixture.

When cold storage is not operational, thermal storage shall not be providing any cooling to the cold storage. The purpose is it to avoid energy wastage of already harvest solar energy. The energy storage capacity shall be minimum 200 MJ. It shall be estimated based on latent heat of the phase change material and overall quantity of phase change material. The need of high energy storage capacity is due to avoid wastage of solar energy on days when cold storage is not utilized for its full load capacity. The excess solar energy will be stored in thermal storage, which will be utilized to provide higher pull down (precooling) capacity or increased autonomy for cloudy/rainy days.

The energy storage capacity of thermal storage should be monitored and displayed with a minimum four linear graduations from minimum to maximum storage capacity. It will allow the user to pre-plan the cold storage operations and avoid spoilage of agriculture commodities.

28.7 Solar System and Electric Battery System for Auxiliary Components

This solar photovoltaic system consists of inverter, electric batteries and MPPT (Maximum Power Point Tracking) charge controller are meant to provide electricity for

auxiliary electrical loads such as fans of evaporator unit, lighting, data monitoring system and thermal storage. It should be enough to operate the entire system for minimum 24 hours with no door opening and temperature achieved to steady state prior for conducting such a testing.

28.8 Temperature set controller

A Temperature controller in the range 4-12 °C by using set point control as per requirement with minimum 1 °C of setpoint differential. The controller should enable with various options like: Digital Human Interface with LCD display and LED indicator, Crop compatibility check and optimum set point control for multi crop storage etc.

28.9 Remote Monitoring system

Remote Monitoring system with data logging at minimum interval of 5 minutes, GPRS based, viewable on internet, indicating cold storage temperature, ambient temperature, thermal storage capacity, compressor speed, electric battery voltage levels and electricity generated by solar, Cold Room Humidity, Ambient Humidity, Door Status, Compressor Protection Fault Indication, GPS Location, Grid Phase loss detection, Grid Under Voltage detection, Notification for Solar Panel Cleaning, Refrigerant leak detection etc. The system will be able to send notification to the user whenever the system needs to be change over to grid assumed that thermal storage has depleted below 25% of its total storage capacity.

29. TESTING AND INSPECTION

The vendor should carry out the testing procedure laid forth by MNRE vide 'Guidelines on Testing Procedure for Solar Cold Storage with Thermal Energy Storage Backup'. All tests shall be carried out as per relevant standards at Vendor works. ANERT reserves the right to witness all tests and carryout inspection or authorize his representatives to witness all tests and carry out inspection. For this Vendor shall notify ANERT at least 5 days in advance giving exact details of tests that would be carried out. The following tests shall be conducted in addition to the for solar cold storage system

- a. General
- b. Earth continuity test

- c. Functional Test
- d. Insulation measurement
- e. Heat run test
- f. Functional test
- g. Burnout test to confirm cooling backup for 30 hrs

30. WARRANTY

- i. The complete system should be warranted against any manufacturing defect or bad workmanship at least for a period of 5 (five) years from the date of commissioning of the systems. This includes replacements of spare part and labour if any.
- ii. Warranty certificate to the above effect must be furnished along with the commissioning reports. Any defect noticed during warranty period should be rectified / replaced by the supplier free of cost upon due intimation by ANERT.

31. OPERATION MANUAL

An Operation and Maintenance Manual should be provided with the solar cold storage system. The manual should have information about Solar Energy, Photovoltaic, modules, Refrigeration system, Solar controller, Inverter, Thermal storage system, Mounting structures, Electronics and Remote Monitoring System. It should also have clear instructions about mounting of PV module, DO's and DONT's and on regular maintenance and troubleshooting of the system. Name and address of the person or centre to be contacted in case of failure or complaint should also be provided. A warranty card for the modules and other component should also be provided.

32. DISPLAY BOARD

- a. The logo of ANERT and details of the scheme as specified in the work order are to be provided.
- b. The board shall be made of GI/SS of min thickness 20 SWG having size 60cm x 30 cm. The matter is to be printed in RGB combination

33. INSURANCE

- 33.2 The power plant 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)**. Also, the damages from wildlife and natural calamity are to be covered in addition,
- 33.3 The insurance premium for the 5 years of warranty is to be paid by the bidder. Only the system components are to be insured. 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.

34. STANDARDS

The Design, Engineering, Manufacture, Supply, Installation, Testing and performance of the equipment shall be in accordance with latest appropriate IEC/ Indian Standards and as detailed in the Technical Specifications Section as per the MNRE / ANERT requirements of the bid document. The goods supplied under this contract shall confirm to the Standards mentioned, where appropriate Standards and Codes are not available, other suitable standards and codes as approved by the authoritative Indian Standards shall be used.

35 ENGINEERING DRAWINGS

The bidder should submit the Cold storage design drawings for approval. ANERT reserves the right to modify the landscaping design, Layout and specification of sub-systems and components at any stage as per local site conditions/requirements. The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any.

The Contractor shall furnish the following drawings Award/Intent and obtain approval:

- a. General arrangement and dimensioned layout including foundation

- b. Schematic drawing showing the requirement of SPV panel, Power conditioning Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters, condensing unit, thermal unit etc.
- c. Structural drawing for solar plant.

36 PACKING

- i. The Bidder shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the contract.
- ii. The packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures/ vibration or any other parameters during transit and open storage.
- iii. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the good's final destination and the absence of heavy handlings facilities at all points in transit.
- iv. The packing, marking and documentation within and outside the item shall comply strictly with such special requirements as shall be provided for in the contract including additional requirements, if any and in any subsequent instructions ordered by the ANERT

37 FACTORY INSPECTION AND TESTS

ANERT reserves the right to inspect manufacturer's works/factory to ascertain the capability/availability of necessary equipment and infrastructure required for manufacture of the items offered. ANERT shall have the access and right to inspect the work or any part thereof at any stage and to test the goods to confirm their conformity to the technical specifications. Successful bidder shall inform ANERT at least 15 days in advance of schedule dispatch for technical inspection.

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.

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)

ANNEXURE A – 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.	Whether the bidder is a bonafide manufacturer/ integrator of the item tendered (Yes/No)?	
6.	Details of EMD submitted along with the bid in favour of CEO ANERT	
7.	Annual turnover of the firm during last five years (Rs.) (Proof to be enclosed)	2021-22 2020-21 2019-20 2018-19 2017-18
8.	No. of service centres /Authorised service providers in Kerala (Proof to be enclosed)	

9.	Whether Bidder was/is De-barred by ANERT (Yes/No)? If ' Yes' period of De-Barring:	
10.	Agreement submitted (Yes/ No)?	

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 B - 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 Design, Supply, Installation, Testing and Commissioning of 3 Nos of Solar Cold
Storage with 5 years warranty in Kerala, India*** 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 Fifteen 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 & 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 – DECLARATION BY THE BIDDER

e-Tender Notification No:, dtd for
Retender for the Design, Supply, Installation, Testing and Commissioning of 3 Nos of Solar
Cold Storage with 5 years warranty in Kerala, India

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 D – DECLARATION OF RELATIONSHIP WITH ANERT EMPLOYEE

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

Tender Notification No.:

Retender for the Design, Supply, Installation, Testing and Commissioning of 3 Nos of Solar Cold Storage with 5 years warranty in Kerala, India

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

FORMAT A – UNDERTAKING FOR NO BLACKLISTING & NO BANNING

(To be provided on Rs.200 Non-Judicial Stamp paper. In Case of JV the following format is to be provided by Each Member of the Joint Venture on their respective letterhead, signed by respective authorized Signatory along with Authorized Signatory for which POA is attached with Bid))

Undertaking for No Blacklisting & No Banning

To

The CEO
ANERT

Sub: Retender for the Design, Supply, Installation, Testing and Commissioning of 3 Nos of Solar Cold Storage with 5 years warranty in Kerala, India

I / We hereby declare that presently our Company/Limited Liability Partnership/ Partnership Firm/ Sole Proprietorship is having unblemished record and is not declared ineligible for corrupt/fraudulent practices by any State/Central Government/PSU on the date of Bid Submission.

I / We further declare that presently our Company/Limited Liability Partnership/ Partnership Firm/ Sole Proprietorship is not blacklisted and not declared ineligible for reasons other than corrupt/fraudulent practices by any State/Central Government/PSU on the date of Bid Submission.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, our security may be forfeited in full and the tender if any to the extent accepted may be cancelled.

(Signature & Seal of Authorized Signatory for which POA attached)

Name of Authorized Signatory:

Designation:

Date:

Place:

FORMAT B – CERTIFICATE OF BIDDER’S FINANCIAL QUALIFICATION

(On Letterhead of the respective entity for which the below details are provided.)

Financial Qualification Certificate

(Rupees in Crores)

S/N	Financial parameters	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
1.	Net Worth					
a)	Paid up Capital					
b)	Free Reserves and Surplus*					
c)	Misc expenses to the extent not written off					
	Net Worth (a+b-c)					
2.	Annual Turnover **					

* Free Reserve and Surplus shall be Exclusive of Revaluation Reserve, written back of Depreciation Provision and Amalgamation.

** Annual total Income/ turnover as incorporated in the Profit and Loss Account excluding non-recurring income, i.e., sale of fixed asset etc.

It is certified that all the figures are based on audited accounts read with auditors report and Notes to Accounts etc.

(Signature & Seal of Authorized Signatory

Name of Authorized Signatory:

Certifying Chartered Accountant:

Designation:

Name of Firm:

Date:

UDIN No:

Place:

Date:

Place:

Note:

1. In addition to above certificate from Chartered Accountant, Bidder is required to submit Firm's Annual Audit Report, Balance sheet, Profit & Loss and Income Tax Returns / CA certificate for last Five years i.e., F.Y: 2015-16, 2016-17, 2017-18, 2018-19 & 2019-20.

FORMAT C – COMPONENT

BID SECURITY BANK GUARANTEE

BG No. :
Amount :
Date :
Valid up to :

This guarantee is made on this day of 20.... by (Complete postal address of the bank) hereinafter called 'the **Bank**', which expression shall unless repugnant to the context or meaning thereof shall include its successors and assigns.

WHEREAS the **ANERT**, having its registered office at PMG-Law College Rd, Vikas Bhavan PO, Thiruvananthapuram, Kerala, PIN – 695 033, hereinafter called as **ANERT**, which expression shall unless repugnant to the context or meaning thereof shall include its successors and assigns in having agreed to exempt(hereinafter called “**contractor(s)**” which expression unless repugnant to the context and meaning thereof shall include its successors and assigns) from depositing with **ANERT**, a sum of Rs. towards Security Deposit in lieu of the said **contractor(s)** having agreed to furnish a bank guarantee for the said sum of Rs. as required under the terms and conditions of Tender No. dated (hereinafter referred as the 'bid') placed by the **ANERT**, on the said **contractor(s)** and on specific request on the part of the said **Contractor(s)**, we the **Bank** hereby unconditionally and irrevocably affirm and undertake-

On production of the Bank Guarantee for Rs..... (Rupees..... only) we,Bank having our Head Office at (herein after referred to as “the Bank”) at the request of M/s.(name of contractor) do hereby undertake to pay to the **ANERT** an amount not exceeding Rs..... (Rupees only), against any loss or damage

caused to or suffered or would be caused to or suffered by the ANERT by reason of any breach by the said contractor of any of the terms and conditions contained in the said agreement

We,Bank, do hereby undertake to pay the amount due and payable under this Guarantee without any demur, merely on a demand from the ANERT stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the ANERT by reasons of breach by the said contractor of any of the terms or conditions contained in the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees only).

This guarantee will not be discharged due to change in the constitution of the bank or the contractor/supplier.

Notwithstanding anything contained hereinbefore:

- 1) Our liability under this Bank Guarantee shall not exceed Rs.....(Rupees only)
- 2) This Bank Guarantee shall be valid upto
- 3) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee amount only and only if you serve us a written claim or demand on or before.....

Dated at this day of 2023

SIGNATURE OF THE BANK _____

SEAL OF THE BANK _____

SIGNATURE OF THE WITNESS _____

Name and Address of the Witness _____

The bank guarantee shall be issued by a bank (Nationalized/Scheduled) located in India