

ANERT
**Agency for New and renewable Energy Research &
Technology**

E-TENDER DOCUMENT

**RfS of Agency for the Operation & Maintenance of
ANERT 2MW Solar PV power plant at
Kuzhalmannam, Palakkad District, Kerala**

Ref. No.: ANERT-TECH/119/2018-PO (AG)

Last date for e-Tender Submission: **14.11.2021**
12.00 Noon

PART-I



Agency for New and Renewable Energy Research and Technology
PMG-Law College Road, Vikas Bhavan PO, Thiruvananthapuram – 695 033, Kerala
Phone: (91-471) 2334122, 2334124, 2331803(office), 2329854 Fax: (91-471)2329853
Web: <http://www.anert.gov.in> email: CEO@anert.in

CONTENTS

PART-I	1
FORMAT FOR COVERING LETTER.....	3
E-TENDER NOTICE.....	4
TENDER ABSTRACT	5
I-A - GENERAL TERMS AND CONDITIONS FOR E-PROCUREMENT	6
I-B – BID QUALIFICATION REQUIREMENTS	11
I-C – SUMMARY OF BID QUALIFICATION REQUIREMENTS.....	12
ANNEXURE I-D - AGREEMENT	14
PART-II	15
II-A –CONDITIONS OF CONTRACT	17
II-C – BIDDER’S TECHNICAL INFORMATION SUMMARY	30
ANNEXURE II-D– DECLARATION BY THE BIDDER	31
ANNEXURE II-E – STATEMENT OF DEVIATIONS.....	32
ANNEXURE II-F– DECLARATION FOR DEVIATION	33

FORMAT FOR COVERING LETTER

Sir,

I/We hereby e-tender for the 2 years Operation & Maintenance under annexed terms and conditions of contract, all the equipment and the related structures for the 2MW PV Power Plant as described in the attached O&M procedures decided by the Agency for New and renewable Energy Research & Technology (ANERT), at the rates quoted in the Price Bid (Part III).

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 dt.....

Yours faithfully,

Place:

Date:

Signature

Name

Designation

(Office Seal)

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

E-TENDER NOTICE

Competitive e-tenders in two cover system, with Envelope 1 (Part-I having Bid Qualification Requirements (BQR), Earnest Money Deposit (EMD) and Part-II with Technical Bid and Commercial terms without Price Bid), and Envelope 2 (Part-III with Price Bid) in accordance with the attached commercial terms and O & M requirements. The tender offers are invited from companies experienced in O&M activities of utility scale (MW scale) Power Plants or Solar power plant asset management for the ***RfS of Agency for the Operation & Maintenance of ANERT 2MW Solar PV power plant at Kuzhalmannam, Palakkad District, Kerala***. The e-tender documents can be downloaded from the e-tendering website of Govt. of Kerala from **02.00 pm on 01.11.2021 to 14.11.2021, 01.00 pm**. Tender form will not be available in any other form.

Thiruvananthapuram

28.10.2021

Sd/-
CEO

TENDER ABSTRACT

Ref. No.	ANERT-TECH/119/2018-PO(AG)
Superscription	RfS of Agency for the Operation & Maintenance of ANERT 2MW Solar PV power plant at Kuzhalmannam, Palakkad District, Kerala
Download of Tender Form	From 02.00 pm on 01.11.2021 to 14.11.2021, 01.00 pm from http://www.etenders.kerala.gov.in
Last date of submission of Tender	14.11.2021 – 01.00 Noon Online at the website http://www.etenders.kerala.gov.in
Date and Time of opening the Tender	15.11.2021 –11.30 am
Cost of Tender form	Rs 2500/- +18% GST
EMD	Rs 37,500/-
Warranty period	2 years comprehensive on site
Site details	Kuzhalmannam, Palakkad District, Kerala State
Name and Address of the officer from whom Tender forms are to be obtained	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
28.10.2021

Sd/-
CEO

I-A - GENERAL TERMS AND CONDITIONS FOR E-PROCUREMENT

This tender is an e-Tender and is being published online for 2 years Operation & Maintenance of a ANERT 2MW SPV power plant at Kuzhalmannam, Palakkad District. The tender is invited in two cover system from the registered and eligible firms 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 II 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: 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. **Publishing of Corrigendum:** All corrigenda shall be published on www.etenders.kerala.gov.in and shall not be available elsewhere.
- iii. **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.
- iv. **Opening of Technical Bid and Bidder short-listing:** The technical bids will be opened, evaluated and shortlisted as per the eligibility and technical qualifications. All documents in support of technical qualifications shall be submitted (online). Failure to submit the documents online will attract disqualification. Bids shortlisted by this process will be taken up for opening the financial bid.

- v. **Opening of Financial Bids:** Bids of the qualified bidder's shall only be considered for opening and evaluation of the financial bid on the date and time mentioned in critical date's section.

3. Documents Comprising Bid:

3(a) The First Stage (Pre-Qualification or Technical Cover based on 1 cover or 2 cover tender system):

3.1 Pre-Qualification or Technical proposal shall contain the scanned copies of the following documents which every bidder has to upload:

3.2 Envelop -1 shall contain, along with Part-I and II (this document in PDF form)/ scanned copies:

- a) Part I & II of the tender documents downloaded from the website
- b) Agreement in the prescribed format (Annexure I-D) on Govt. of Kerala stamp paper worth Rs.200/-
- c) Copy of Registration Certificate of the bidder firm
- d) Copy of the work orders and certification from the owner/developer regarding O&M experience, to prove the experience in executing similar orders, as specified
- e) Documents to prove the Turnover of the bidder
- f) Details of the technical offer
- g) Declaration by the Bidder (format as in Annexure II D)
- h) Statement of Deviations (format as in Annexure – II E)
- i) Declaration for Deviations (format as in Annexure - II F)

3.3 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.

3.4 The department doesn't take any responsibility for any technical snag or failure that has taken place during document upload.

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

3.5 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.

3.6 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 2500/- +18% GST and Earnest Money Deposit or Bid Security of Rs 37,500/-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 the following manner through e-Payment facility provided by the e-Procurement system:
- i. **State Bank of Travancore (SBT) Internet Banking**: If a bidder has a SBT internet banking account, then, during the online bid submission process, bidder shall select SBT option and then select Internet banking option. The e-Procurement system will re-direct the bidder to SBT's internet banking page where he can enter his internet banking credentials and transfer the tender document and EMD amount.
 - ii. **National Electronic Fund Transfer (NEFT)** If a bidder holds bank account in a different bank, then, during the online bid submission process, bidder shall select NEFT option. An online remittance form would be generated, which the bidder can use for transferring amount through NEFT either by using internet banking of his bank or visiting nearest branch of his bank. After obtaining the successful transaction receipt no., the bidder has to update the same in e-Procurement system for completing the process of bid submission. Bidder should only use the details given in the Remittance form for making a NEFT payment; otherwise payment would result in failure in e-Procurement system.
 - iii. **Real Time Gross Settlement (RTGS)** - This is also included as a valid mode of payment in e-Procurement system for remittance of tender document fees and EMD fees.

As NEFT payment status confirmation is not received by e-Procurement system on a real-time basis, bidders are advised to exercise NEFT mode of payment option at least 48 hours prior to the last date and time of bid submission to avoid any payment issues.

NEFT payment should be done according to following guidelines:

- i. **Single transaction for remitting Tender document fee and EMD**: Bidder should ensure that tender document fees and EMD are remitted as one single transaction.
- ii. **Account number as per Remittance Form only**: Account no. entered during NEFT remittance at any bank counter or during adding beneficiary account in Internet banking site should be the same as it appears in the remittance form generated for that particular bid by the e-Procurement system. Bidder should ensure that tender document fees and EMD are remitted only to the account number given in the Remittance form provided by e-Procurement system for that particular tender.

- iii. Bidders must ensure that the banker inputs the Account Number (which is case sensitive) as displayed in the Remittance form. No additional information like bidder name, company name, etc. should be entered in the account no. column along with account no. for NEFT remittance.
- iv. RTGS payments, State Bank of Travancore Transfers and NEFT payments are allowed and are treated as valid mode of payments.
- v. **Amount as per Remittance form:** Bidder should ensure that the amount being remitted is neither less nor higher than the amount shown in remittance form.
- vi. **UTR Number:** Bidders should ensure that the remittance confirmation (UTR number) received after NEFT transfer should be updated as it is, in the e-Procurement system for tracking the payment.
- vii. **One Remittance Form per Bidder and per Bid:** The remittance form provided by e-Procurement system shall be valid for that particular bidder and bid and should not be re-used for any other tender or bid or by any other bidder.

Any transaction charges levied while using any of the above modes of online payment has to be borne by the bidder. The supplier/contractor's bid will be evaluated only if payment status against bidder is showing "Success" during bid opening.

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 (Envelop -1). 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 corporate office with detailed postal address and pin code, telephone and fax nos. etc in their tenders so as 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.

I-B – BID QUALIFICATION REQUIREMENTS

10. Bid Qualification Requirements

- 10.1** 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.
- 10.2** An agreement in Rs.200/- Kerala stamp paper as per the format given in Annexure I-D must be submitted as a hardcopy to ANERT office before the deadline for submission of e-tender.
- 10.3** **The Bidder shall be companies experienced in O&M activities of utility scale (MW scale) Power Plants or Solar power plant asset management.**
- 10.4** **The Bidder shall have successfully experienced in maintaining utility scale utility scale (MW scale) Power Plants or Solar power plant asset at least for 2years at the time of bid opening.**
- 10.5** The Bidder shall furnish the following documentary evidence to establish his qualification and experience above along with the bid.
- a. Copy of Work Order/ Contract agreement and completion certificate that the bidder has the experience as described in clause 10.4.
 - b. Performance/Experience/Completion Certificate from the beneficiary/developer/owner regarding successful operation of the Solar PV power plant/ Plants for at least two years.
- 10.6** The Bidder should have a minimum annual turnover of 50lakhs or more for any 2 years out of the last three years. Documentary evidence must be submitted in the form of certified copies of Audited statement of accounts/ Profit and loss accounts or Sale tax returns statement or certification from the Chartered Accountants.

I-C – SUMMARY OF BID QUALIFICATION REQUIREMENTS

(To be filled in by the bidder)

Table 1: Bid Qualification Requirements

1.	Name of the bidder/ Firm	
2.	Address in full	
3.	Contact Details <div style="text-align: right;">Mobile Land Phone Fax Email</div>	
4.	GST Number	
5.	Name and Designation of the authorised signatory	
6.	Type of Organisation (Certified current MNRE Channel Partner)	
7.	Year & Place of Establishment (The firm should have at least 2 years of Experience after the establishment)	
8.	Total Solar power plant O&M /Solar power plant asset management experience and capacity of solar power plants handled so far (The details of O&M experience shall be filled as per Table 2 of this section)	Total capacity: Nos. of Years of Successful O&M experience: (Proof to be enclosed, and flagged as, page no.)

9.	The Bidder should have a minimum annual turnover of 50 Lakhs for 2 years in the period of last 3 years. This shall be supported by audited financial statements.	2018-19..... 2019-20 2020-21
10.	Agreement submitted (Yes/ No)?	

O&M EXPERIENCE DETAILS WITH CAPACITY AND NO. OF YEARS

Table 2 O& M experience details with capacity and no. of years in experience

Sl No	Power Plant Site Name	Owner/developer/beneficiary	Capacity	No. of years in O&M experience

Documentary evidence for all 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 I-D - AGREEMENT

ARTICLES OF AGREEMENT executed on this the day of Two thousand and between the Agency for New and renewable Energy Research & Technology (hereinafter referred to as ANERT) of the one part and Sri representing M/s (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 *RfS of Agency for the Operation & Maintenance of ANERT 2MW Solar PV power plant at Kuzhalmannam, Palakkad District, Kerala* 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 2 years Operation & Maintenance of ANERT 2MW SPV power plant at Kuzhalmannam, Palakkad District, Kerala is awarded to the bounden, the bounden shall within fifteen days of acceptance of his e-tender, execute an agreement with ANERT incorporating all the terms and conditions under which ANERT accepts their e-tender offer.

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 their 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 and 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
.....

ANERT
**Agency for New and renewable Energy Research &
Technology**

E-TENDER DOCUMENT

*RfS of Agency for the Operation & Maintenance of
ANERT 2MW Solar PV power plant at
Kuzhalmannam, Palakkad District, Kerala*

Ref. No. : ANERT-TECH/119/2018-PO (AG)

Last date for e-Tender Submission: **14.11.2021**
02.00 Noon

PART-II



Agency for New and renewable Energy Research & Technology
PMG-Law College Road, Vikas Bhavan PO, Thiruvananthapuram – 695 033, Kerala
Phone: (91-471) 2334122, 2334124, 2331803(office), 2329854 Fax: (91-471)2329853
Web: <http://www.anert.gov.in> email: CEO@anert.in

PART-II – CONTENTS

A. Conditions of Contract

1. General Conditions
2. Special Conditions
3. Schedule of Supply
4. Payment
5. Operation and Maintenance

B. Technical Specifications

Annexure II-C – Bidder’s technical information summary

Annexure II-D – Declaration by the bidder

Annexure-II-E – Statement of deviations

Annexure II-F – Declaration for deviation

Annexure II-G– Engineering Drawing of Structure

Annexure II-H– Operation & Maintenance

Annexure II-I– Soil Test Report Summary

Annexure II-J– The Concept Drawings for Reference

II-A –CONDITIONS OF CONTRACT

11. General Conditions

- 11.1 The tenders shall be submitted online at www.etenders.kerala.gov.in
- 11.2 The tenders shall 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 shall 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 shall 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. Please be noted that this is not a purchase order; instead, a Work Order to 2 years Operation & Maintenance of ANERT 2MW Solar PV Power Plant. Hence all taxes (GST), duties, and other Govt. related expenses, if any, in connection with the Work Order shall apply to this project.
- 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.
- 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) The successful tenderer shall before signing 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 of Demand Draft or Bank Guarantee in favour of the CEO payable at Thiruvananthapuram, Kerala from any of the Nationalised/Scheduled Banks. 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.
- 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.
- (a) All payments to the contractors will be made by the CEO, ANERT in due course
- i. by Online Internet banking or NEFT cash transfer or cheques on District Treasury or State Bank of India
- (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 required technical verification by ANERT district office/ANERT Technical Team.
- 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 installation of the SPV Power Plant within the time provided for 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 some 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 of the PV Power Plant according to the existing Engineering Standards and as specified by ANERT.
- 11.20** No representation for enhancement of rate once accepted will be considered.
- 11.21** The PV Plant installation shall be with the same components as per the successful bid offer.
- 11.22** The prices quoted should be inclusive of GST which are or shall become payable by the contractor under existing or future laws or rules of the country of origin/supply or delivery during execution of the contract. The estimated O&M cost is INR 25lakhs (including all taxes & charges) for 2 years.
- 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 his tender an agreement executed and signed in Kerala Stamp Paper of value Rs.200/-. A specimen form of agreement is given as Annexure I-D 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 contractor, 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 contractor under the contract is terminated, and the date upon which such termination becomes effective.
- 11.27** Envelope - 1 shall be opened at the time and date announced in the tender notice.
- 11.28** Envelope-2 containing Price Bid will not be opened at the time of opening Envelope-1. Envelope-2 will be opened later, the date of which will

be intimated to the qualified tenderers, and this information would also be available on the e-tenders website.

- 11.29** 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.
- 11.30** 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 bids are included in Envelope-A or Envelope-B, OR if Envelope-C is not submitted along with the tender, such tenders will be summarily rejected.
- 12.4** During the technical evaluation period, ANERT may seek more clarifications/details from any or all of the tenderers, if felt necessary.
- 12.5** The price bids of technically qualified tenderers 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 execute the project at the L1 price.
- 12.7** The tender offer shall be kept valid for acceptance for a period of 6 months from the date of opening of offers (envelopes A/B). The offers with lower validity period are liable for rejection.
- 12.8** The evaluation of the financial bid will be based on the grand total of all-inclusive amount quoted.

13. Payment

- 13.1** The terms of O&M amount payment shall be:
- i. O&M amount shall be paid on pro rata basis in the interval of 6 months from 10 December 2021.
 - ii. The O&M procedures and the payment as given above will be validated by an O&M agreement executed between ANERT and the successful bidder.

- 13.2** Income tax, contribution to workers' welfare fund and other statutory deductions shall be made as applicable for each payment as per prevailing norms.

14. Scope of Operation & Maintenance (O&M)

14.1 There is separate scope for Operation and Maintenance (O&M) of the 2MWp Solar Power Plant for a period of two (2) years from 10 Dec 2021. The O&M of the solar Plant is in accordance with an Operations and Maintenance Agreement (the "O&M Agreement").

14.2 The details of the Scope under O&M are described below.

The Contractor shall be responsible for Comprehensive Operation and Maintenance of the 2MWp Solar Power Plant for a period of two (2) years 10 Dec 2021. Annual Maintenance Contract after the 2 years of Plant Operation will be decided on tender basis at the appropriate time.

However, the technical personal from the successful bidder shall attend for a training prior to one week to the above date with the concerned personal to be deployed at the site.

The bidder shall provide the following personnel as part of O&M of the plant.

1. One Graduate Engineer (BTech in EEE) (shall be resident personnel)
2. One Diploma Engineer (Diploma in EEE) (shall be resident personnel)
3. One Security Personnel
4. Cleaning Personnel

The O&M team will operate the solar Plant in accordance with an Operations and Maintenance Agreement (the "O&M Agreement") which shall provide for, at a minimum, the following services:

Performing routine and non-routine maintenance on the solar plant

- Operating the solar plants.
- Providing all materials (other than major equipment like Grid Connected Inverters, Cables, Solar Modules, 10kWp Off-Grid PV Plant Inverter, Battery etc.) and services necessary for solar Plant maintenance.
- O&M team should meet expenses related to the internet connection at the site and the telephone expenses corresponding to the broadband internet/telephonic connection.
- Monitoring the operations of the Project via the computer monitoring system.

- Performing all duties for the safe and efficient operation and maintenance as per the standards.
- Complying with all regulatory obligations.
- Cleaning of PV Modules at regular intervals.

Operator shall perform the O&M work in a prudent and efficient manner and in accordance with:

- Manufacturers and systems designers' specifications, the Annual Operating Plan for the Plant and all operation and maintenance manuals,
- All Indian applicable laws including environmental protection, pollution, sanitary, employment and safety laws, ("Government Rules").
- Prudent Utility Practice.
- Keeping the PV Modules clean without soiling, so that the plant performs satisfactorily.

Operator shall use all reasonable and practical efforts:

- To maximize plant capacity utilization
- To minimize plant downtime
- To optimize useful life of all the equipment of the energy project.

Contractor shall be responsible for all the required activities for the successful running, optimum energy generation & maintenance of the Solar Photovoltaic Power Plant covering:

- Monitoring controlling, troubleshooting maintaining of records & registers.
- Supply of all spares/consumables of inverters/PCUs, Transformers, indoor panels, VCBs, CTs, PTs, Bus bars, cables terminals kits, Isolators with earth switch, LAs and spares of all other associated equipment of solar plant etc. for a period of 2 (two) years. Cost of these items (including Cost of spares) shall be included in the price quoted.
- Supply & use of consumables throughout the maintenance period as per recommendations of the equipment manufacturers.
- Conducting periodical checking, testing, over hauling and preventive action.
- Daily general up keeping including cleaning of all equipment, building, amenities, roads, Solar Photovoltaic land area etc.
- Submission of Daily Generated Reports (DGR), periodical & monthly reports to ANERT on the energy generation & operating conditions of the solar plant.
- Taking care of the full security aspects of the Solar Power Plant.

- Maintenance of Lightning Arrestors.
- Continuous monitoring the performance of the Solar Power Plant and regular maintenance of the whole system including Modules, PCU's, junction boxes underground cables, outdoor/indoor Distribution Board transformers, VCBs, CT, PTs, and all associated equipment etc. necessary for extracting and maintaining the maximum energy output from the Solar Power Plant.
- Periodic Testing/ calibration of all other measuring devices as per respective manufacturer's instruction/ guideline.

Operation and Maintenance of the Solar Photovoltaic Power Plant is required for a period of 2(two) years from 10 December 2021 which shall be carried out at fixed cost. The period of Operation and Maintenance will be deemed to commence from 10 December 2021.

Operation and Performance Monitoring

Operation part consists of deputing manpower as discussed in clause 15.2 necessary to operate the Solar Photovoltaic Power Plant at the optimum capacity. Operation procedures such as preparation to start, routine operations with safety precautions, monitoring of Solar Power Plant etc. shall be carried out as per the manufacturer's instructions to have trouble free operation of the complete system.

Daily work of the operators in the Solar Photovoltaic Power Plant involves:

- Cleaning of Modules
- Keeping a log of the voltage, current, power factor, power (Active & Reactive), wind speed, frequency, Module and ambient temperature in one hr interval.
- Keeping a log of daily current, voltage, Active and Reactive Power and Energy output of the solar Power Plant
- Note down failures, interruption in supply and tripping of different relays, reason for such tripping, duration of such interruption etc.
- Check battery voltage – specific gravity and temperature. The operator shall record monthly energy output, down time, etc.
- Keeping a log of grid failures and plant down time.
- Providing arrangements for ANERT & KSEB Ltd. for recording the Joint Meter Reading in the beginning of every month.

Maintenance

The contractor shall carry out the periodical/plant maintenance as given in the manufacturer's service manual and perform at least minimum requirement.

- Preventive/Routine Maintenance shall be done by the Contractor at least once in a every three months and shall include activities such as, cleaning and checking the health of the Solar PV system, cleaning of module surface, tightening of all electrical connections and any other activity that may be required for proper functioning of the

Solar PV system.

- Keeping a good rapport with the ANERT district office, Palakkad and ANERT Head Quarters.
- Regular periodic checks of the Modules, PCU's shall be carried out as a part of routine preventive maintenance.
- To meet the maintenance requirements stock of consumables are to be maintained as well as various spare as recommended by the manufacturer at least for 2 years to be kept for usage.
- Care shall be taken for outdoor equipment to prevent corrosion. Cleaning of the junction boxes, cable joints, insulators etc shall also be carried out at every month interval.
- Resistance of the earthing system as well as individual earthing is to be measured and recorded every month. If the earth resistance is more than 3-ohm, suitable action is to be taken to bring down the same.
- According to the recommendations stock of special tools and tackles shall be maintained for Modules, PCU's and other major electrical equipment.
- Solar modules surface shall be thoroughly cleaned on a regular basis to ensure maximum possible generation. Manufacturer's approved method of cleaning shall be adopted for the purpose.
- A maintenance record is to be maintained by the contractor to record the regular maintenance work carried out as well as any breakdown maintenance along with the date of maintenance, reasons for the breakdowns, steps taken to attend the breakdown, duration of the breakdown etc.
- The Schedules will be drawn such that some of the jobs other than breakdown, which may require comparatively long stoppage of the Power Plant, shall be carried out preferably during the non-sun period.
- The contractor shall maintain the SCADA system including the SCADA components and RTU incorporated with the SCADA system for communicating with the SLDC (KSEB Ltd.).
- The contractor shall maintain the real-time SCADA communication between the plant and SLDC.
- The Contractor shall deploy enough manpower at Solar Photovoltaic Power Plant site to carryout work instructions and preventive maintenance schedules as specified.
- The Contractor will attend to any breakdown jobs immediately for repair/replacement /adjustments and complete at the earliest working round the clock. During breakdowns (not attributable to normal wear and tear) at O&M period, the Contractor

shall immediately report the accidents, if any, to the Engineer in Charge at site of ANERT showing the circumstances under which it happened and the extent of damage and or injury caused.

- The Contractor shall comply with the provision of all relevant acts of Central or State Governments including payment of Wages Act 1936, Minimum Wages Act 1948, Employer's Liability Act 1938, Workmen's Compensation Act 1923, Industrial Dispute Act 1947, Maturity Benefit Act 1961, Mines Act 1952, Employees State Insurance Act 1948, Contract Labour (Regulations & Abolishment) Act 1970, Electricity Act 2003, Grid Code, Metering Code, MNRE guide lines, ANERT Guidelines or any modification thereof or any other law relating whereto and rules made there under from time to time.
- The contractor shall at his own expense provide all amenities to his workmen as per applicable laws and rules.
- The Contractor shall ensure that all safety measures are taken at the site to avoid accidents to his Workmen.
- If negligence / mal operation of the contractor's operator results in failure of equipment such equipment should be repaired/ replaced by contractor at free of cost.
- If any jobs covered in O&M Scope are not carried out by the contractor during the O&M period pro-rata deduction will be made based on the quantum of work from the O&M contract bills.

Tools and Tackles

The Contractor shall arrange and stock for all the necessary tools and tackles for carrying out all the maintenance work covered under this contract.

Key Activities for preventive maintenance

Activity	Details
Cleaning of PV Modules by Water spraying for the removal of dust deposits	Cleaning on Weekly basis or as and when required
Review Array Output, Current and Voltage to verify power operation	Onsite check in a random pattern to verify the SCADA out put

Watch for shading caused by trees, weeds, other obstructions	Vegetation growth can vary from year to year and more so after the monsoon period.
Inspect the PV Array surface for fouling due to excessive dirt or debris (bird debris, leaves etc.)	If water cleaning is not removing the dirt, the surface should be cleaned with a gentle rinse with plain water or mild detergent
Inspect the PV Modules for cracks/damage	Preventive maintenance check in accordance with the PV Module supplier's instructions.
Inspect the entire system for loose or damaged wiring	Preventive maintenance check in accordance with the OEM's instructions.
Inspect Inverter and clean any filters or vents to ensure unrestricted Air flows.	Preventive maintenance check in accordance with the OEM's instructions.
Calibration of DAS/SCADA etc.	Periodic calibration of DAS/SCADA and other instrumentation

List of Key activities for preventive maintenance of the project

Security Services

The contractor must arrange proper security system including deployment of security personnel at his own cost for the check vigil for the Solar Power Plant. Any loss or damage on account of security lapse shall be compensated by the contractor. Proper checking & recording of all incoming & outgoing materials, vehicles, persons and a logbook of that activities shall be maintained.

Handing Over

At the end of the Operation and Maintenance period of 2 years, the Contractor shall hand over the complete system to ANERT in the best working condition. Any component found defective/inefficient/worn out shall be rectified/ replaced/ made good at contractor's cost before handing over the system to the ANERT. To ensure longevity & safety of the core equipment and optimum performance of the system the Contractor should use only genuine spares of high-quality standards.

STAFF

The power plant will be under the charge of an engineer employed by the successful bidder and supported by adequate staff as and when necessary, during the O&M period. Also, security personnel will be provided by the successful bidder.

TRAINING

Training will be imparted to the O&M team by the EPC company and ANERT.

This operational training shall cover the following:

- The nature, purpose and limitations of all plant and equipment
- The detailed operating instructions on each section and equipment of the plant
- Normal start up and shutdown program for the plant
- The emergency procedures and all related HSE issues according to the standards

The basis for the training shall be the O&M manual provided by the OEMs of various equipment.

15. Location Details

15.1 The project is located at the land owned by ANERT at Kuzhalmannam, Palakkad District. This site is well connected with roads and 15 km away from the Palakkad Town. The site details are given in the following table.

Site Name	Kuzhalmannam
Ground Area available	12 Acres
Ownership	ANERT
District	Palakkad
State	Kerala
Latitude	10 ⁰ 43' 2.1" N
Longitude	76 ⁰ 36' 48.1"E
Altitude	96m
Access to Site	1.3km through Kuzhalmannam – Koduvayoor road from Kuzhalmannam
Nearest National Highway	NH-47
Nearest Village/Town	Kuzhalmannam
Nearest Railway Station	Palakkad Junction (21km from the site)
Nearest Airport	Coimbatore (60km from the site)
Chances of Soiling	Low to Med
Water Availability & Source	Two separate ponds and an open well at the site
Type of terrain	Almost plain with some small height differences
Nearest KSEB Substation	Koduvayoor 11kV-33kV, 2 x 5MVA Substation, 8km away from the site.
Average Ambient Temperature	25.25 °C (NASA data)
Highest Temperature (Measurement data)	41

15.1 A summary of the existing plant is given below; Bidders are requested to visit the site before quoting the O&M cost for undertaking the work:

Project Name:	ANERT 2MW Kuzhalmannam Solar Power Plant
Type of the Project:	Solar Photovoltaic Power Plant (On-Grid)
Capacity of the PV Plant:	2MWp
Area occupied:	7.4 Acre (Shade-free area)
Solar PV Module:	Renesola (JC 260M – 24/Bb)
Inverter:	Hitachi (HIVERTER-NP201i-1000kW)
Inverters:	2 Nos.
No. of Solar Modules:	7704 Nos
No. of PV Modules in a String:	24
No. of Strings in the PV Array:	321

Power Evacuation: - The generated energy from the 2MW Solar PV Project is evacuated to the grid through a nearby KSEBL 11kV Grid facility.

Metering: - An Import/Export meter is installed by KSEB at the interconnection point for metering and billing purpose which would register the net export/ import to the grid. A Joint Meter reading is being taken by ANERT and KSEBL on the first day of every month for billing purpose.

II-C – BIDDER’S TECHNICAL INFORMATION SUMMARY

(To be filled in by bidder on company letter head)

1.	Name of the bidder as in registration certificate	
2.	Address in full	
3.	Contact Details Mobile Land Phone Fax No. Email address	
4.	Company Registration details	
5.	GST Number	
6.	Name of the authorised signatory	

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:

ANNEXURE II-D- DECLARATION BY THE BIDDER

e-Tender Notification No. for RfS of Agency for the Operation & Maintenance of ANERT 2MW Solar PV power plant at Kuzhalmannam, Palakkad District, Kerala

Tender notification Date

To

The CEO
ANERT

We, the undersigned, declare that:

1. We have examined and have no reservations to the Bidding Document, including Addenda No.: (If any)
2. We offer to supply in conformity with the Bidding Document and in accordance with the delivery schedule .
3. Our Bid shall be valid for a period of 6 months from the date fixed as deadline for the submission of tenders in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
4. If our Bid is accepted, we commit to submit a Security Deposit in the amount of 1.5 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 contractors 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 equipment and services are satisfying the technical criteria specified in the bid.

Signature

Name

Date

ANNEXURE II-E – STATEMENT OF DEVIATIONS

Name of Work: RfS of Agency for the Operation & Maintenance of ANERT 2MW Solar PV power plant at Kuzhalmannam, Palakkad District, Kerala

e-Tender No:.....

Name and Address:

To

The CEO
ANERT, Thiruvananthapuram

Dear Sir,

Sub:- Deviations from bid conditions relating to bid No. for the RfS of Agency for the Operation & Maintenance of ANERT 2MW Solar PV power plant at Kuzhalmannam, Palakkad District, Kerala

In respect of whatever has been stated to the contrary anywhere else in our offer, only the following are the deviations and variations from the exception to the specifications and documents for the subject e-Tender No..... These deviations and variations are exhaustive, except these deviations. The Operation & Maintenance will be affected as per your bid specifications and documents. Further I/We agree that additional conditions, if any, found in the offer other than those stated below, except those pertaining to any rebates offered/reductions in cost to the ANERT shall not be given effect to. I/We also certify that the financial implication of these deviations if to be withdrawn has been furnished.

Signature of the tenderer

ANNEXURE II-F- DECLARATION FOR DEVIATION

“DECLARATION FOR DEVIATION”

From

To

The CEO
ANERT
Thiruvananthapuram

Dear Sir,

Sub:- Bid for RfS of Agency for the Operation & Maintenance of ANERT 2MW Solar PV power plant at Kuzhalmannam, Palakkad District, Kerala – reg:-
Ref:- Bid No.

This has reference to your above referrer bid. As required therein we are pleased to submit our price bid for the above bid in a separate sealed cover. We have also submitted the pre-qualification bid in a separate sealed cover.

We declare that we are qualified to participate in the above-referred bid in line with your qualification requirements stipulated in the “Bid documents”. We further declare that we have brought out all our deviations to the conditions of contract stipulated in your bid documents indicating therein the cost for withdrawing the conditions in case you for such withdrawal will be limited to the amount mentioned against each deviation separately.

It is understood that the deviations to the conditions of the bid documents as have been brought out are exhaustive.

We agree and declare that irrespective of whatever has been stated elsewhere in the bid documents only those deviations that have been specifically brought out in Annexure-II to Part II hold good.

I/We have enclosed..... proof of having deposited an amount of Rs..... towards Earnest Money Deposit, in a separate sealed cover.

Thanking You

Yours faithfully,

(Signature of Bidder)
Name
Designation

Date: