

**ANERT****Agency for Non-conventional Energy & Rural Technology****TENDER DOCUMENT**

*Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala*

Tender No. : 12/SPV/ANERT/2012

Last date for Tender Submission:  
07.03.2013, 12:00 noon

**PART-I**

<b>Issued to</b> (NOT TRANSFERABLE)	:
<b>Signature of officer issuing document</b>	:
<b>Date of issue of tender document</b>	:

**Agency for Non-conventional Energy & Rural Technology**

TC No. 14/649, Thycaud PO, Thiruvananthapuram – 695 014, Kerala

Phone: (91-471) 2338077, 2334122, 2333124, 2331803 • Fax: (91-471)2329853

Web: <http://www.anert.gov.in> email: [director@anert.in](mailto:director@anert.in)

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## FORMAT FOR COVERING LETTER

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Sir,

I/We hereby 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 Non conventional Energy and Rural Technology (ANERT), at the rates quoted against each item. The articles will be delivered and installed/commissioned within the time and at the place(s) specified in the schedule.

I am/We are remitting herewith the required amount of Rs. .... as Earnest Money Deposit in the form of DD/BG No. .... dated.....drawn on ..... bank

Yours faithfully,

Place:

Signature

Date:

Name

Designation

(Office Seal)

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



# ANERT

## Agency for Non-conventional Energy & Rural Technology

TC No. 14/649, Thycaud PO, Thiruvananthapuram – 695 014, Kerala

Phone: (91-471) 2338077, 2334122, 2333124, 2331803 • Fax: (91-471)2329853

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## TENDER NOTICE

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Sealed and competitive tenders in three part system Part-I (Envelope-A) Bid Qualification Requirements (BQR) with Earnest Money Deposit (EMD), Part-II (Envelope-B) Technical Bid with Commercial terms without Price Bid, and Part-III (Envelope-C) Price Bid in accordance with the attached commercial terms and technical specifications are invited from reputed & experienced Manufactures/Suppliers for the **Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala**. The tender forms can be obtained from the office of the Director, Agency for Non-conventional Energy and Rural Technology, Thycaud PO, Thiruvananthapuram 695014 on all working days from 10.30 am to 04.30 pm by submitting a request in the firm's letterhead along with the required payment towards cost of document in the form of Cash/ DD drawn in favour of Director, ANERT, payable at Thiruvananthapuram. The tender document is not transferable. To get tender form by post, cost of tender form plus Rs.150/- as postal charges should be sent by Cash/DD. Undersigned will not be responsible for delay in obtaining and submitting tenders by post. If the due date for receiving and opening the tender happens to be declared holidays, then the tender will be received and opened on the very next day, for which no prior intimation will be given.

Thiruvananthapuram  
14.02.2013

Sd/-  
Director

## TENDER ABSTRACT

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Tender no.	12/SPV/ANERT/2012
Superscription	Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala (3 × 5 kW <sub>p</sub> )
Sale date of Tender form	From 18.02.2013 to 06.03.2013 (on working days 10.30 a.m. to 4:30 p.m.)
Last date of submission of Tender	12.00 noon, 07.03.2013
Date and Time of opening the Tender	03.00 pm, 07.03.2013
Cost of Tender form	Rs.25,000 /- + 5% VAT (Rs.26,250/-)
EMD	Rs.75,000/- (By DD/Bank Guarantee) Govt. of Kerala PSUs only are exempted from furnishing EMD
Warranty period	5 years comprehensive on site
Site details	ANERT HQ Building near PMG, Thiruvananthapuram
Name and Address of the officer from whom Tender forms are to be obtained	The Director ANERT, Thycaud. PO, Thiruvananthapuram – 695 014, Kerala
Place of opening of tender	Office of Director, ANERT at the above address

Thiruvananthapuram  
14.02.2013

Sd/-  
Director

## I-A INSTRUCTION TO BIDDERS

### 1. Bid Submission

- 1.1 Bids shall be submitted in three envelopes named:
- i) Part-I – Envelope-A
  - ii) Part-II – Envelope-B
  - iii) Part-III – Envelope-C
- 1.2 **Envelope-A** shall contain:
- a) Earnest Money Deposit (EMD) as prescribed
  - b) Agreement in the prescribed format (Annexure I-D)
  - c) Copy of Registration Certificate of the firm
  - d) Copy of work orders and certification from the purchaser regarding execution of the order, to prove the experience in executing similar orders, as specified
  - e) Documents to prove the Turnover of the bidder
  - f) List of Service centres within Kerala with full address and phone nos. (or the required undertaking)
  - g) Part-I of the tender document duly signed by the bidder on all pages
- 1.3 **Envelope-B** shall contain:
- a) Part-II of the tender documents consisting of the General Conditions, Special Conditions, Technical Specifications (duly signed by the bidder on all pages)
  - b) Details of the technical offer, including test certificates issued for the respective components/ models offered
  - c) Declaration by the Bidder (format as in Annexure II-E)
  - d) Statement of Deviations (format as in Annexure II-F)
  - e) Declaration for Deviation (format as in Annexure II-G)
  - f) Declaration of relationship with ANERT employee (format as in Annexure II-H)
- 1.4 If any of the bidders indicate price in Envelopes A or B, the bid will be summarily rejected.
- 1.5 **Envelope-C** shall contain the Price Schedule as per Part-III of tender document, duly signed by the tenderer/authorised signatory of the tenderer.
- 1.6 **The pages of the tender document, annexures and attachments should be serially numbered (starting from 1 in Part-I through its attachments, continuing to Part-II and its attachments, and finally to Part-III).** The page numbers of the attachments, such as test certificates and proof of pre-qualification documents, should be cross-

referenced in the bid qualification format (I-C) and the bidder's technical information summary (II-C).

- 1.7 The tenders in three sealed envelopes (A, B and C) as above will be put in a separate sealed envelope. The superscriptions on each envelope shall be as given below:

**Superscription on envelopes**

<b><u>Envelope-A (Part-I)</u></b>	
Tender No. 12/SPV/ANERT/2012	
<b><u>Tender for Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala</u></b>	
<i>[name and address of bidder]</i>	To DIRECTOR, ANERT

<b><u>Envelope-B (Part-II)</u></b>	
Tender No. 12/SPV/ANERT/2012	
<b><u>Tender for Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala</u></b>	
<i>[name and address of bidder]</i>	To DIRECTOR, ANERT

<b><u>Envelope-C (Part-III) – Price Bid</u></b>	
Tender No. 12/SPV/ANERT/2012	
<b><u>Tender for Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala</u></b>	
<i>[name and address of bidder]</i>	To DIRECTOR, ANERT

- 1.8 All the above three sealed envelopes shall be put in another envelope and sealed, with superscription as follows:

Tender No. 12/SPV/ANERT/2012	
<b><u>Tender for Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala</u></b>	
Last Date for Submission: <b>07.03.2013, 12.00 noon</b>	
Date and Time of opening the Tender: 07.03.2013, 03.00 pm	
<i>[name and address of bidder]</i>	To DIRECTOR, ANERT, Thycaud, Thiruvananthapuram 695014

## **2. Opening of Bids**

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- 2.1 Tenders shall be opened at the office of the Director ANERT.
- 2.2 Envelope-A shall be opened at the time and date announced in the tender notice. If the bidder has submitted the requisite EMD and Agreement Envelope-B also will be opened on the same day.
- 2.3 Envelope-C containing Price Bid will not be opened at the time of opening Envelope-A/B, but will be authenticated on the envelope by the officers authorised to open the Bids. Envelope-C so authenticated will be kept under the safe custody of the officer empowered to open the tender. Envelope-C (Price Bid) will be opened later, the date of which will be intimated to the qualified tenderers.

## **3. Validity**

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- 3.1 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
- 3.2 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

## **4. Deviations**

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

## **5. Blacklist**

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- 5.1 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.

## **6. Bidder's Location**

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- 6.1 The tenderers are requested to furnish the exact location of their factories/ godowns 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.

## **7. Late offer**

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- 7.1 Any tender received by ANERT after the due date and time specified for submission of the tender will be declared late, and rejected.

## **8. Postal/ Transit Delay**

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- 8.1 The Director ANERT, Thiruvananthapuram will not be responsible for any postal or other transit delays in receipt of the tender

## I-B – BID QUALIFICATION REQUIREMENTS

### 9. Bid Qualification Requirements

- 9.1 Every tenderer should send along with his tender an Earnest Money Deposit (EMD). This may be paid by *Demand Draft/Bank Guarantee* drawn in favour of the *Director, ANERT* payable at *Thiruvananthapuram, Kerala* from any of the Nationalised/Scheduled Banks. The EMD of the disqualified tenderers will be returned as soon as possible. The EMD of the successful tenderers may be adjusted towards the security deposit. No interest will be paid for the earnest money deposited.
- 9.2 An agreement in Rs.100/- Kerala stamp paper as per the format given in Annexure I-D must be enclosed.
- 9.3 Bidder must submit valid test certificates of the components (solar PV module, inverter, battery, and charge controller, if external to inverter) proposed to be supplied/used. Bids without valid test certificates will be rejected.
- 9.4 The bidder should have successfully installed solar photovoltaic power plants of at least 25 kW<sub>p</sub> aggregate capacity, when considering systems with minimum 1 kW<sub>p</sub> capacity, and at least one system of 5 kW<sub>p</sub> or higher capacity. Copy of work order/ bills/ certification from the purchaser regarding execution of the order should be submitted as a proof of executing the supply.
- 9.5 Annual turnover of the bidder should be at least Rs.50 lakh, in any of the last three years. Documentary evidence has to 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 Statutory Auditor.
- 9.6 Vendor should have at least one service centre / authorised service provider in 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 agreeing to set up and intimate the same within 15 days of letter of indent, should be enclosed.

## I-C – SUMMARY OF BID QUALIFICATION REQUIREMENTS

(To be filled in by the bidder)

1.	Name of the bidder	
2.	Address in full	
3.	Contact Details  Mobile  Land Phone  Fax  Email	
4.	Name and Designation of the authorised signatory	
5.	Details of EMD submitted along with the bid in favour of Director ANERT	
6.	Total number and capacity of solar power plants installed so far (only systems with capacity 1 kWp or higher should be listed)	Number of systems: Total capacity:  (proof to be enclosed, and flagged as Annexure ....., page no. ....)
7.	Details of solar power plant of 5 kW <sub>p</sub> or higher capacity (at least one)	
8.	Annual turnover of the firm during last three years (Rs.)	2011-12 .....  2010-11 .....  2009-10 .....  (proof to be enclosed, and flagged as Annexure ....., page no. ....)
9.	No. of service centres/ Authorised service providers in Kerala	    (proof or undertaking to be enclosed, and flagged as Annexure ....., page no. ....)

Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala **10**

10.	Whether Bidder was/is de-barred by ANERT (Yes/No)? If ' Yes' period of De-Barring:	
11.	Agreement submitted (Yes/ No)?	
12.	Test certificates corresponding to the models/ components offered (solar PV module, inverter, battery, and charge controller) are submitted (Yes/No)?	

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 Non-conventional Energy and Rural 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 tender for the *Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala* specified therein subject to the terms and conditions contained in the said 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 tender is accepted by ANERT. NOW THESE PRESENTS WITNESS and it is hereby mutually agreed as follows:-

In case the 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 his tender, execute an agreement with ANERT incorporating all the terms and conditions under which ANERT accepts his 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 Non-conventional Energy and Rural 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
.....	.....

## Agency for Non-conventional Energy & Rural Technology

# TENDER DOCUMENT

*Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala*

**Tender No. : 12/SPV/ANERT/2012**

**Last date for Tender Submission:  
07.03.2013, 12:00 noon**

## PART-II

<b>Issued to</b> (NOT TRANSFERABLE)	:	
<b>Signature of officer issuing document</b>	:	
<b>Date of issue of tender document</b>	:	



**Agency for Non-conventional Energy & Rural Technology**  
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Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala

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## PART-II – CONTENTS

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### A. Conditions of Contract

10. General Conditions

11. Special Conditions

12. Schedule of Supply

13. Payment

14. Service and maintenance

### B. Technical Specifications

Annexure II-C – Bidder's technical information summary

Annexure II-D – Format of warranty card

Annexure II-E – Declaration by the bidder

Annexure-II-F – Statement of deviations

Annexure II-G – Declaration for deviation

Annexure II-H – Declaration of relationship with ANERT employee

## II-A –CONDITIONS OF CONTRACT

### 10. General Conditions of Contract

- 10.1 The tenders should be addressed to the Director, ANERT in a sealed cover with the tender number and name duly superscribed thereon.
- 10.2 The tenders should be in the prescribed form which should be obtained from DIRECTOR, ANERT on payment of the price. The cost of tender forms once paid will not be refunded. Tender forms are not transferable. Tenders that are not in the prescribed form are liable to be rejected. **Tender forms downloaded from the website will not be accepted.**
- 10.3 Intending tenderers should send their tenders so as to reach the Director, ANERT, on or before due date and time mentioned in the tender abstract. Late tenders will not be accepted.
- 10.4 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.
- 10.5 The tenderer shall submit a copy of PAN card of the authorised signatory along with tender.
- 10.6 Tenders subject to conditions will not be considered. They are liable to be rejected on that sole ground.
- 10.7 The tenders will be opened on the specified day and time in the office of the Director, ANERT in the presence of such of those tenderers' representatives who may be present with proper authorisation issued by the tenderer.
- 10.8 Every tenderer should send along with his tender an Earnest Money Deposit. This may be paid by *Demand Draft/ Bank Guarantee* drawn in favour of the *Director, ANERT* payable at *Thiruvananthapuram, Kerala* from any of the Nationalised/ Scheduled Banks.
- 10.9 If any tenderer withdraws from his 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.
- 10.10 (a) The tenderer shall clearly specify whether the articles offered bear Bureau of Indian Standards Mark / IEC Certification or not. In such cases, they shall produce copies of certification mark along with their tender in support of it.
- (b) Tenders shall clearly specify whether the goods are offered from indigenous sources from imported stocks in India or from foreign sources to be imported under a licence.
- 10.11 The final acceptance/rejection of the tenders rests entirely with Director, ANERT who do not bind themselves to accept the lowest or any tender.
- 10.12 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.

- 10.13 Communication of acceptance of the 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:
- 10.14 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 prescribed in clause 10.8 supra or in Fixed Deposit Receipts of State Bank of Travancore/State Bank of India endorsed in favour of Director, ANERT. 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.
- 10.15 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.
- 10.16 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 1% of the delivered price of the delayed stores or unperformed services for each month 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.
- 10.17 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.
- 10.18 All payments to the contractors will be made by the Director, ANERT in due course

Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala **16**

- by cheques on District Treasury or State Bank of Travancore in the case of supplies from abroad, by drafts as may be arranged between the contracting parties
- 10.19 All incidental expenses incurred by ANERT for making payments outside the State in which the claim arises shall be borne by the contractor.
- 10.20 Payments will be made only after the items are physically accepted in good condition by ANERT.
- 10.21 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.
- 10.22 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.
- 10.23 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 Director 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.

- 10.24 Any some of money due and payable to the contractor (including security deposit returnable to him) under this contract may be appropriated by the Director 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.
- 10.25 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.
- 10.26 The tenderer shall undertake to supply materials according to the standard specifications.
- 10.27 No representation for enhancement of rate once accepted will be considered.
- 10.28 The prices quoted should be inclusive all taxes, duties, cesses etc. 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.
- 10.29 The tenderer will invariably furnish the required certificates with their bills for payment—  
“Certified that the goods which VAT has been charged have not been exempted under the VAT Rules made there under and the charges on account of sales tax on these goods are correct under the provisions of the relevant Act or the rules made there under certified further that we ..... (or our Branch or Agent) .....  
(Address) are registered as dealers in the State of .....  
under Registration No. .... for purposes of sales tax.”
- 10.30 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.

- 10.31 The tenderer should send along with his tender an agreement executed and signed in Kerala Stamp Paper of value Rs.100/-. 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.
- 10.32 Conditions in the technical document, technical specifications and special conditions of this tender document would override these general conditions, wherever applicable.
- 10.33 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.
- 10.34 Envelope A shall be opened at the time and date announced in the tender notice. If the bidder has submitted the requisite EMD and Agreement, Envelope B also will be opened on the same day.
- 10.35 Envelope-C containing Price Bid will not be opened at the time of opening Envelope-A/B, but will be authenticated on the envelope by the officers authorised to open the Bids. Envelope-C so authenticated will be kept under the safe custody of the officer empowered to open the tender. Envelope-C (Price Bid) will be opened later, the date of which will be intimated to the qualified tenderers.
- 10.36 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 Director, ANERT voluntarily resides.
- 10.37 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.

## **11. Special Conditions**

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- 11.1 Each bidder should submit only one (1) bid. Any bidder who submits/participates in more than one bid for the work shall be disqualified.
- 11.2 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.
- 11.3 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.
- 11.4 During the technical evaluation period, ANERT may seek more clarifications/details from any or all of the tenderers, if felt necessary.
- 11.5 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.

- 11.6 If found essential, ANERT reserves the right, in the interest of completion of work within the time limit, to award portion/portions of the supply 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.
- 11.7 ANERT reserves the right to increase / decrease the final quantity to be ordered without changing the unit price offered by the bidder.
- 11.8 Valid test certificate of the model offered / sub-components (SPV module, inverter charge controller and battery) as per the technical specification provided in this tender document, issued by MNRE or NABL or IEC approved labs, should be enclosed.
- 11.9 If more than one model with different sub-components (such as battery, modules or energiser) is offered for the price quoted, test certificates of the components (as per technical specifications provided in this tender document) should be submitted. Supplies shall be limited to only the make(s)/model(s) offered to and approved by ANERT.
- 11.10 If more than one model is offered by the bidder (all meeting the required specifications), all of them should be offered at the same price. If different prices are listed, all the models will be considered against the lowest price offered only.
- 11.11 The rate quoted should be all inclusive including delivery of materials at the locations to be specified, and the cost of materials and labour for the civil works, erection and commissioning, warranties, taxes and duties.
- 11.12 The price quotes should be inclusive of initial cost of supply, installation and commissioning, support during the warranty period of 5-years.
- 11.13 The rate should be valid for a period of 6 months from the last date of submission of tenders.

## **12. Schedule of Supply**

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- 12.1 The items should be delivered and installed at Smart Buildings of ANERT HQrs., PMG, Thiruvananthapuram, Kerala specified by ANERT, under prior intimation and supervision of ANERT.
- 12.2 The supply and installation of the entire lot shall be completed within 3 months of the date of supply order.
- 12.3 Supply of the main components such as SPV module, battery, inverter and charge controller should be effected as per the makes offered (with valid test certificates) with the tender.
- 12.4 Penalty for delay in supply and installation will be imposed at 5% per month up to a maximum 25%. In case of delay in supply and installation Director, ANERT may cancel the contract and take recourse to other action as deemed appropriate.

### **13. Payment**

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- 13.1 No advance payment will be given. Payment will be released on receipt of invoices duly certified for acceptance of stores by the concerned Officer of ANERT.
- 13.2 The terms of payment shall be:
- i. 90% of the invoice amount shall be paid on successful commissioning of the systems. The remaining 10% shall be retained as performance security as given below. Performance security shall not be released against bank guarantee.
  - ii. 5% of the total amount shall be paid after one year
  - iii. The remaining 5% shall be paid after the five-year warranty period
  - iv. The security deposit of 5% furnished along with the contract agreement shall be released on completion of supply, installation and commissioning.
- 13.3 Income tax, contribution to workers' welfare fund and other statutory deductions shall be made from the payment as per prevailing norms.

### **14. Service and maintenance**

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- 14.1 The faulty system or components should be replaced/ repaired within 15 days of fault reporting. The servicing should be carried out at the site of installation. The service personnel should visit the installations at least once in 3 months for preventive maintenance even if no faults are reported. Delay in servicing beyond 15 days of fault reporting would attract penalty at the rate of Rs.10,000 per fortnight or part thereof.
- 14.2 A designated contact Telephone Number and address should be submitted for reporting faults during the warranty period.

## II-B – TECHNICAL SPECIFICATIONS

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### 15. Scope of the Work

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- 15.1 The scope covers supply, installation and commissioning of a solar photovoltaic power plant in the Smart Buildings of ANERT HQs., PMG, Thiruvananthapuram, Kerala, as mentioned below:

Supply, Installation and commissioning of 3 nos. of 5kWp (totalling 15kWp) SPV Off-grid power plant for peak load substitution and demand side management in the Smart Building of ANERT HQ, PMG, Thiruvananthapuram, Kerala.

### 16. Location Smart

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#### Details of sites for the installation of 15kWp SPV Off-grid Power Plant

- 16.1 Site: Smart Building of ANERT HQ, PMG, Thiruvananthapuram, Kerala. The proposed location for installation of the SPV modules is on the top of the Building. The battery, inverter and control units can be housed in the adjacent area.

### 17. Definition

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- 17.1 Standalone solar PV power plant system comprises of solar PV modules with inbuilt array optimiser or panel MPPT optimiser, lead acid battery bank, intelligent on line inverter which feeds uninterrupted quality AC power to electrical loads taking energy from PV or battery bank as the case may be. Batteries will be charged from solar energy by charge controller integrated in the inverter or by an external charge controller.

### 18. Duty Cycle

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- 18.1 The system should be capable for operating 5 hours daily during a normal sunny day under average daily installation of 5 kWh/sq.m on a horizontal surface

### 19. Load

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- 19.1 The system should be connected to the available operating for the period of 5 hours daily on an average.

### 20. SPV Modules

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- 20.1 Only indigenously manufactured, mono crystalline silicon cell (5kWp), poly crystalline silicon cell (5kWp) & thin film (5kWp) PV modules of 200W<sub>p</sub> or higher capacity should be used in the power plant
- 20.2 The PV module should have IEC 61215 / IS14286 (crystalline silicon cell), IEC 61646/Equivalent IS( thin film) qualification certification for solar PV modules
- 20.3 In addition, the module must conform to IEC 61730 Part-1 requirements for

Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala **22**

- construction & Part-2 requirements for testing for safety qualification
- 20.4 PV modules must qualify salt mist corrosion testing as per IEC 61701.
- 20.5 Shading correction/ bypass for optimizing array out to be incorporated in each module or panel level MPPT and shading optimization to be provided.
- 20.6 Each PV module used in any solar power project must use a RF identification tag (RFID), which must contain the following information. The RFID can be inside or outside the module laminate, but must be able to withstand harsh environmental conditions.
- (i) Name of the manufacturer of PV Module
  - (ii) Name of the manufacturer of Solar cells
  - (iii) Month and year of the manufacture (separately for solar cells and module)
  - (iv) Country of origin (separately for solar cell and module)
  - (v) I-V curve for the module
  - (vi) Peak Wattage,  $I_m$ ,  $V_m$  and FF for the module
  - (vii) Unique Serial No. and Model No. of the module
  - (viii) Date and year of obtaining IEC PV module qualification certificate
  - (ix) Name of the test lab issuing IEC certificate
  - (x) Other relevant information on traceability of solar cells and module as per ISO 9000 series
- 20.7 The following details should be provided on the module
- i. Name of the manufacturer
  - ii. Month and year of manufacture
  - iii. Peak Wattage of the module
- 20.8 The PV modules must be tested and approved by one of the IEC authorized test centres. Test certificates can be from any of the NABL/ BIS accredited Testing / Calibration Laboratories.
- 20.9 The power output of the module(s) under STC should be a minimum of 15,000W<sub>p</sub> (3x5kW<sub>p</sub>)
- 20.10 PV modules used in solar power plants/ systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

## 21. Power Conditioning Unit

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- 21.1 Power Conditioning Unit (PCU) shall comprise of charge controller and MPPT unit with power optimiser, inverter, voltage stabilizer, and distribution panel along with necessary displays, indicators and alarms.
- 21.2 The operation of the PCU should be in such a way that when sunshine is sufficiently available, the load should be drawn from the SPV module, and at times when

sunshine is insufficient, load should be drawn from both module and battery. When working at partial load, balance SPV power should be catered for battery charging.

#### **CHARGE CONTROLLER & MPPT**

- 21.3 The control system should continuously adjust the voltage of the generator to optimize the power available. The power conditioner must automatically re-enter standby mode when input power reduces below the standby mode threshold. Front Panel display should provide the status and fault indication (if any)
- 21.4 The charge controller and MPPT should conform to IEC 60068-2 (1,2,14,30) for environmental testing.
- 21.5 The charge controller and MPPT should conform to following electrical parameters:
- Operational Voltage Range: 48V or higher according to the battery bank and panel array
  - Series disconnect, PWM type
  - Controlling element: IGBT
  - The Charge controller/MPPT units should conform to IEC 60068-2 (1,2,14,30), if charge controller is not part of the inverter
- 21.6 Solid State MPPT based series pulse width modulation charger with minimum three stages (bulk, absorb and float)
- 21.7 Current rating as required for panel array and battery bank
- 21.8 Electronic protection for:
- Short circuit
  - Overload
  - Over temperature
  - Reverse polarity
- 21.9 Auto resetting electronic over current protection
- 21.10 Digital LED/ LCD display of input SPV voltage and current, battery voltage and current. Separate indication for SPV charging shall also be provided. Battery Charge Level LED Indicator (s) – Low, Medium, High, Full. Battery Low indicator and Alarm/ cut-off.

#### **INVERTER**

- 21.11 A minimum of 48 volt DC to 400 volt AC (3 phase) inverter for 5kW<sub>p</sub> system. Rated capacity of inverter should be 5kVA (3 nos. of 5kVA)
- 21.12 Will have following features preferably from Indian Manufacturer:
- Conform to IEC 61683/ IS 61683 for efficiency measurement, and IEC 60068-2 (1,2,14,30) or equivalent BIS standard for environmental testing.
  - Type: Self commuted, current regulated, IGBT based, true sine wave.
  - Output voltage: Output voltage 400±2% for 3φ
  - Output frequency :50 Hz
  - THD: Less than (<) 3%

- f) Efficiency: Above 90% at 50% load & 95% at full load.
  - g) Ambient temperature: 10 to 50°C
  - h) Relative humidity: 90% Non-condensing
- 21.13 Protections:
- a) Short circuit (circuit breaker & electronic protection against sustained fault)
  - b) Over-load protection
  - c) Under voltage & Over-voltage of Battery (automatic shutdown)
  - d) Auto/ Manual re-connects provision
  - e) Reverse polarity protection both for the PV array and Battery bank (DC)
- 21.14 Cooling:
- Air cooled
- 21.15 Other Features:
- a) Surge Protection: 150% of the rated capacity for a period of 10 seconds
  - b) Provision for connection of Data-logger to monitor at least ten system parameters & events logs.
  - c) Acoustic Noise Level  $\leq 50$  dB
- 21.16 Indicators / Displays / Alarms
- a) Digital Display(s) of input DC SPV voltage & current, along with Energy Meter
  - b) Digital Display (s) AC output voltage, frequency, power and current
  - c) Digital Display of output AC kWh meter (Daily/ Cumulative)
  - d) Overload Alarm / cut-off
  - e) System Cut-off Indicator
  - f) System Reset Button
- 21.17 Electrical safety, earthing and protection
- a) Internal Faults: In built protection for internal faults including excess temperature, commutation failure, over load and cooling fan failure (if fitted) is obligatory.
  - b) Over Voltage Protection: Over Voltage Protection against atmospheric lightning discharge to the PV array is required. Protection is to be provided against voltage fluctuations and internal faults in the power conditioner, operational errors and switching transients.
  - c) Earth fault supervision: An integrated earth fault device shall have to be provided to detect eventual earth fault on DC side and shall send message to the supervisory system.
  - d) Cabling practice: Cable connections must be made using insulated copper cables, as per BIS specifications. All cable connections must be made using suitable terminations for effective contact. The copper cables must be run in GL trays with covers for protection.
  - e) Fast acting semiconductors type current limiting fuses and surge arrestors at

the main bus-bar and input from solar array.

- f) The inverter shall include an easily accessible emergency OFF button located at an appropriate position on the unit.
- g) All exposed surfaces of ferrous parts shall be thoroughly cleaned, primed and painted or otherwise suitably protected to survive nominal 30 years design life of the unit.
- h) The inverter enclosure shall be weatherproof and capable of surviving climatic changes and should keep the inverter intact under all conditions in the room where it will be housed. The inverter shall be located indoor and should be either wall/ pad mounted. Moisture condensation and entry of rodents and insects shall be prevented in the inverter enclosure. Components and circuit boards mounted inside the enclosures shall be clearly identified with appropriate permanent designations, which shall also serve to identify the items on the supplied drawings.
- i) All doors, covers, panels and cable exits shall be gasketed or otherwise designated to limit the entry of dust and moisture.
- j) All doors shall be equipped with locks. All openings shall be provided with grills or screens with openings no larger than 0.95 cm.

#### 21.18 Factory Testing

- a) Operation of all controls, protective and instrumentation circuit shall be demonstrated by direct test if feasible or by simulation operation conditions for all parameters that cannot be directly tested.
- b) Operation of start-up, disconnect and shutdown controls shall also be tested and demonstrated. Stable operation of the inverter and response to control signals shall also be tested and demonstrated.
- c) Factory testing shall include measurement of phase currents, efficiencies, harmonic content and power factor.
- d) Factory testing of the Inverter/ Inverters should be carried out and witnessed by the Purchaser's Engineers at the manufacturer's premises, if necessary.

#### **WEB-BASED / REMOTE MONITORING**

- 21.19 Facility for remote/ web-based monitoring of all the basic and major parameters of the power plant including but not limited to the energy generated, array voltage and current, battery voltage and current, inverter and MPPT parameters, local solar radiation, temperature (ambient and array), status, etc. at least at 10 minute intervals, and also the cumulative data. A data logging facility with computer connectivity, preferably over Ethernet or other standard protocols is also required for each of the power conditioning units.

## **22. Battery Bank**

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- 22.1 Battery bank comprising of flooded type lead acid tubular flooded/ gel batteries conforming to IEC 61427 or applicable IS standards should be supplied, installed, and commissioned.

- 22.2 Test certificate submitted should qualify the minimum requirements as per above standards for capacity test, ampere-hour efficiency test, watt-hour efficiency test, self-discharge test.
- 22.3 3 nos. of lead-acid battery banks (two of tubular flooded battery, and third with tubular Gel battery) each will have a minimum rating of 20,000 watt-hour  $\pm$  4%, 48V or higher dc systems with 2 volt batteries.
- 22.4 Battery capacity is rated C/10 at 27°C discharge rate. 75% of the rated capacity of the battery should be between fully charged & load cut-off conditions.
- 22.5 The following additional information on the batteries to be supplied:
- Overcharge voltage
  - Load disconnect voltage
  - Modules reconnect voltage
  - Float voltage
  - Temperature compensation required for proper operation
  - Ampere-hour efficiency/ watt-hour efficiency
  - Self-discharge (less than 3% per month at 30°C)
- 22.6 The following facilities are also to be provided at each site for the maintenance of the flooded type batteries:
- Suitable ceramic vent plugs with float level indicators will be provided with the batteries
  - Distilled water topping up once in 3 months
  - Accessories like hydrometer, volt meter, jigs, stands, rubber, gloves, and boots etc. to be provided.
- 22.7 It will be staged on a suitable metal stand duly painted with acid resistant paint to cover less space.

### **23. Array Support Structure**

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- 23.1 Wherever required, suitable number of PV panel structures shall be provided. Structures shall be of flat-plate design using either I or L sections.
- 23.2 Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts. Galvanizing should meet ASTM A-123 hot dipped galvanizing or equivalent, which provides at least spraying thickness of 70 microns on steel as per IS 5905, if steel frame is used. Aluminium frame structures with adequate strength and in accordance with relevant BIS standards can also be used.
- 23.3 Structures shall be supplied complete with all members to be compatible for allowing easy installation at the site.
- 23.4 The structures shall be designed to allow easy replacement of any module.
- 23.5 Each structure shall have a provision to adjust its angle of inclination to the horizontal as per the site conditions. Solar module should be inclined towards

south direction and installed at an angle of 10° from the horizontal.

- 23.6 Each panel frame structure shall be so fabricated as to be fixed on the roof top column/ wall structures/ground. The structure should be capable of withstanding a wind load of 200 km/hr after grouting and installation. The front end of the solar array must be 30 cm above the roof top. Grouting material for SPV structures shall be as per M15 (1:2:4) concrete specification. If the module arrays are installed on ground, proper PCC foundation to be provided and the bottom of the array should be elevated to a height of 1 metre from the ground.
- 23.7 The supplier shall specify installation details of the PV modules and the support structures with appropriate diagrams and drawings. Such details shall include, but not limited to, the following;
- Determination of true south at the site
  - Array tilt angle to the horizontal, with permitted tolerance
  - Details with drawings for fixing the modules
  - Details with drawings for fixing the junction/ terminal boxes
  - Interconnection details inside the junction/ terminal boxes
  - Structure installation details and drawings
  - Electrical grounding (earthing as per BIS specifications)
  - Inter-panel/ inter-row distances with allowed tolerances; and
  - Safety precautions to be taken.
- 23.8 The array structure shall support SPV modules at a given orientation and absorb and transfer the mechanical loads to the rooftop column properly. Detailed design and drawing shall be submitted to ANERT for acceptance and approval before execution of work.
- 23.9 The array structure and mounting on the rooftop should be so designed to install them on the rooftop without damaging the floor/ waterproofing on the rooftop.

## **24. AC Distribution Panel Board**

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- 24.1 AC Distribution Panel Board (DPB) shall control the AC power from inverter and should have necessary surge arrestors.
- 24.2 Necessary change-over switches (4-pole 2-way for 3-ph) shall be provided by the supplier to connect the PCU to the load. The change-over switch shall be used to switch the load to utility power.

## **25. Cables, switches and general requirements**

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- 25.1 Halogen-free cross-linked compound insulated copper cables with current rating suitable for AC and DC as per the National Electric Code, and meeting:
- General Test and Measuring Method as per IEC 60227/ IS 694
  - Cables for working voltages up to 1100 V and UV resistant for outdoor installation as per IEC 60502/ IS 1554 (Pt. I & II)

- 25.2 PV module interconnecting cables should be with standardised integrated connectors
- 25.3 Cable Marking: All cable/wires are to be marked in proper manner by good quality ferule or by other means so that the cable can be easily identified.
- 25.4 Switches/ circuit breakers/ connectors meeting general requirements and safety measurements as per IS 60947 Part I, II, III and EN 50521 for AC/DC.
- 25.5 Junction boxes, enclosures for inverters/ charge controllers shall meet IP 54 (for outdoor)/ IP 21 (for indoor) as per IEC 529.

## **26. Warranty**

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- 26.1 5 years warranty should be provided by the supplier for the system and components or part of the system has to be provided as per the special conditions of the contract.
- 26.2 PV modules used in solar power plants/ systems must be warranted for their output peak watt capacity, which should not be less than 90 % at the end of 10 years and 80% at the end of 25 years
- 26.3 The Warranty Card to be supplied with the system must contain the details of the system supplied, as given in the Annexure II-D.

## **27. Operation Manual**

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- 27.1 An Operation, Instruction and Maintenance Manual, in English and Malayalam should be provided with the system.
- 27.2 The following minimum details must be provided in the manual:
- a) About Photovoltaic
  - b) About solar power plant – its components and expected performance.
  - c) About PV module
  - d) About battery
  - e) About electronics
  - f) About charging and significance of indicators
  - g) DO's and DON'T's
  - h) Clear instructions on regular maintenance and trouble shooting of solar power plant
  - i) Name and address of the contract person in case of non-functionality of the solar power plant.

## **28. Bill of Material**

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- 28.1 The bidder should provide the bill of material mentioning the quantity of each of the item consisting in the system, along with the offer.

## **29. Display board**

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- 29.1 The logo of ANERT and details of the scheme as specified in the work order and support from MNRE and ANERT shall be displayed prominently

## **30. Site inspection**

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- 30.1 It is recommended that the bidders visit the site for the physical verification and for correctly estimating the quantity, especially related to structure and cabling, before submitting the bids.

## II-C – BIDDER’S TECHNICAL INFORMATION SUMMARY

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

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

7. Details of main components in the systems offered and the test certificates  
*(If multiple makes/ models are offered, separate sheets with all these details should be attached for each make/ model)*

S/N	Criteria	PV Module	Inverter	Charge controller	Battery
1.	Make offered				
2.	Model offered				
3.	Lab from which Test certificate obtained				
4.	Test certificate No.				
5.	Date of test certificate				
6.	Standards to which it complies, as per test certificate				
7.	Copy of test certificate in full, enclosed (Yes/ No) <i>(Also specify ref. page no. in this tender submission)</i>				

I have read the General Conditions, Special Conditions and Technical Specification of this tender and hereby agree to participate in the tender strictly adhering to the condition and the details furnished along with bid are true and correct.

Signature  
of authorised signatory

Name  
Designation

Date:

## ANNEXURE II-D – FORMAT FOR WARRANTY CARD TO BE SUPPLIED WITH EACH SOLAR SYSTEM

1. Name & Address of the Bidder/Bidder of the System :
2. Name & Address of Purchasing Agency :
3. Date of supply of the system :
4. Details of PV Module(s) supplied in the system
  - Make :
  - Model :
  - Serial No(s). :
  - Wattage of the PV Module(s) under STC :
  - Warranty valid up to :
5. Details of Battery (If supplied)
  - Make :
  - Model :
  - Batch/Serial No(s). :
  - Rated V & Ah capacity at C/10 rate at 27°C :
  - Warranty valid up to :
6. Details of Electronics & other BOS items including (Inverter, Charge controller if any)
  - System Make :
  - Model :
  - Serial No(s). :
  - Warranty valid up to :
7. Designation & Address of the person to be contacted for claiming Warranty obligations :

## ANNEXURE II-E – DECLARATION BY THE BIDDER

Tender Notification No. 12/SPV/ANERT/2012 for Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala

Tender notification Date: 14.2.2013

To

The Director  
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 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 offers items with certifications from MNRE or NABL approved Test laboratories satisfying the technical criteria specified in the bid.

Signature

Name

Date

## ANNEXURE II-F – STATEMENT OF DEVIATIONS

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Name of Work: Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala

Tender No.12/SPV/ANERT/2013

Name and Address:

To

The Director  
ANERT, Thiruvananthapuram

Dear Sir,

Sub:- Deviations from bid conditions relating to bid No. .... for the Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, 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 Tender No..... These deviations and variations are exhaustive, except these deviations. The entire supply and installation will be effected 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-G – DECLARATION FOR DEVIATION

“DECLARATION FOR DEVIATION”

From

To

The Director  
ANERT  
Thiruvananthapuram

Dear Sir,

Sub:- Bid for Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, 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:

## ANNEXURE II-H – DECLARATION OF RELATIONSHIP WITH ANERT EMPLOYEE

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

Tender Notification No.: .....

Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala

To

The Director  
ANERT

Name of the ANERT employee with Designation:

Name of the bidder related to the employee:

This is to put on record that ..... 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 refrain from corrupt, fraudulent, collusive or coercive practices on competing for the contract.

Signature

Name

Date

**ANERT**

Sl.No.

**Agency for Non-conventional Energy & Rural Technology**

## TENDER DOCUMENT

*Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala*

Tender No. : 12/SPV/ANERT/2012

Last date for Tender Submission:  
07.03.2013, 12:00 noon

### PART-III

<b>Issued to (NOT TRANSFERABLE)</b>	:	
<b>Signature of officer issuing document</b>	:	
<b>Date of issue of tender document</b>	:	



**Agency for Non-conventional Energy & Rural Technology**  
TC No. 14/649, Thycaud PO, Thiruvananthapuram – 695 014, Kerala  
Phone: (91-471) 2338077, 2334122, 2333124, 2331803 • Fax: (91-471) 2329853  
**Web:** <http://www.anert.gov.in> **email:** [director@anert.in](mailto:director@anert.in)

Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala

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## PART-III – PRICE SCHEDULE

Tender no. 12/SPV/ANERT/2012 for the Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala

Name of the Bidder:

Sl. No.	Item	capacity	Basic Price (Rs.)	CST/ KVAT @ (Rs.)	All inclusive amount (Rs.)
1.	Power plant with mono crystalline PV module array and Battery (tubular flooded) bank	5 kW			
2	Power plant with poly crystalline PV module array and Battery (tubular gel) bank	5 kW			
3	Power plant with thin film PV module array and Battery (tubular flooded) bank	5 kW			
	<b>GRAND TOTAL (*)</b>				

Total all inclusive price in words: Rupees .....

(\*) If the total amount quoted in words and figures differ, the amount mentioned in words will be taken for acceptance

### Condition:

1. The rate quoted should be all inclusive including delivery of materials at the locations specified, and the cost of materials and labour for the civil works, erection and commissioning, warranties, taxes and duties.
2. ANERT reserves the right to split the order among multiple technically qualified vendors based on the rate quoted for each type of system. ANERT may not necessarily consider the grand total for evaluation of the tender.

Signature of the Bidder

(authorised signatory)

Name

Designation

Date:

(Office seal)

Supply and Installation of 15 kWp SPV Off-grid power plant at ANERT HQ Smart Building, near PMG, Thiruvananthapuram, Kerala

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