

Invitation of Expression of Interest for Empanelment of Manufacturers/ System Integrators for Supply, Installation & Commissioning of SPV Water Pumping Systems in all over Kerala

*Notification No10900/ANERT/TO/2014
Dated 24th DEC 2014*

PART-I

Submitted by _____ :
(name and address of bidder)



Agency for Non-conventional Energy & Rural Technology

TC No. 12/1446(1), 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: director@anert.in

Contents

PART-I	1
FORMAT FOR COVERING LETTER.....	3
I.A – NOTICE	4
I.B – ABSTRACT	5
I.C – ABOUT THE PROGRAMME	6
1. <i>The Implementation plan</i>	6
2. <i>Scope of Work</i>	6
3. <i>Role of ANERT</i>	7
I.D – BIDDING PROCEDURE.....	9
4. <i>Bid document</i>	9
5. <i>Bid submission</i>	9
6. <i>Part-I – Pre-qualification Criteria</i>	9
7. <i>Technical Qualification Criteria</i>	10
8. <i>Financial Bid details</i>	12
I.E – EMPANELMENT PROCEDURE	14
9. <i>Steps of empanelment</i>	14
10. <i>General Terms and conditions</i>	16
I.F- GENERAL PARTICULARS OF BIDDER.....	18
I.G- Check list.....	19
PART-II	21
II.A – TECHNICAL REQUIREMENTS	22
II.B – TECHNICAL INFORMATION SUBMISSION FORM.....	29
ANNEXURE II-C – FORMAT FOR SUBMITTING DETAILS OF INSTALLED SYSTEMS.....	34
ANNEXURE-II-D– FORMAT FOR UNDERTAKING.....	35
PART-III	36
III.A – FORMAT FOR SUBMITTING FINANCIAL BID	37

Format for Covering Letter

Sir,

I/We hereby express my/our interest to be included as an Empanelled Agency of ANERT for the supply, installation, commissioning, 5 year comprehensive warranty and maintenance of SPV Water Pumping Systems for undertaking the work throughout Kerala, as per the terms and conditions of contract, decided by the Agency for Non conventional Energy and Rural Technology (ANERT), at the rates approved by ANERT against each model. The articles referred to and described in the attached specification and quantity will be delivered and installed/commissioned within the time schedule and at the location of the registered beneficiary as per the work order from the beneficiary.

I am/we are remitting herewith the required amount of Rs. 25,000/- as application fee as DD 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 Agency, signed by the authorised signatory.)

I.A – Notice

*Notification No:10900/ANERT/TO/2014
Dated 24.12.2014*

Expression of Interest in accordance with the attached Pre qualification criteria, technical specification and financial terms and conditions are invited from reputed & experienced Manufacturers/ System Integrators who are approved Channel Partners of MNRE, Govt. of India, for Solar Photovoltaic off-grid program with valid accreditation as on the last date of submission of offers, for supply, installation, commissioning, 5 year warranty and maintenance of SPV Water Pumping Systems based on the work order from the registered beneficiaries under the “SPV Water Pumping Systems Programme” being implemented by ANERT with the Central Financial Assistance. The EoI form and guidelines can be downloaded from the website (www.anert.gov.in) of ANERT. The application received on or before 12 noon, 30.01.2015 at the office of Director, ANERT, T.C 12/1446(1), Law College Road, Vikas Bhavan PO, Thiruvananthapuram-695 033 by post or by hand, along with application fee of Rs.25,000/- as DD in favour of Director, ANERT, Thiruvananthapuram will be evaluated and qualified bidders shall be included in the empanel list.

Thiruvananthapuram
24.12.2014

Sd/-
Director

I.B – Abstract

Notification No.	10900/ANERT/TO/2014
Superscription	<i>Expression of Interest for the Empanelment of Agencies for Supply, Installation & Commissioning of SPV Water Pumping Systems</i>
Period of contract	one year
Date of release of Invitation	29.12.2014
Last date of submission EOI by the agencies	12 noon, 31.01.2015
Place of opening Submission by Agencies	Office of Director, ANERT,PMG, Vikas bhavan P.O Thiruvananthapuram– 695 033, Kerala
Application fee	Rs.25000/-
How to obtain the application form for submitting Eoi	To be downloaded from the website of ANERT: www.anert.gov.in
Technical bid opening Date and Time	03.00 PM, 31.01.2015
Minimum security deposit	Rs 5 lakhs as security deposit at the time of entering rate contract agreement with ANERT Thiruvananthapuram

Thiruvananthapuram
24.12.2014

Sd/-
Director

I.C – About the Programme

1. THE IMPLEMENTATION PLAN

- 1.1 ANERT will invite applications from interested beneficiaries through a centralised registration process.
- 1.2 The Expression of Interest for preparing the list of Empanelled Agencies of ANERT for the installation of 1380 numbers of SPV Water Pumping Systems all over Kerala for irrigation and drinking water shall be invited and a list of qualified firms will be published, and will be intimated to beneficiaries along with the approved price list.
- 1.3 The beneficiary shall have the freedom to select an Agency of their choice from the list provided from ANERT for installation of the solar water pumping system.
- 1.4 **Lowest quoted 10 agencies only will be considered for empanelment of particular model of pump set.**
- 1.5 The Agency selected by the beneficiary should conduct the site visit and furnish the pre-installation report in the format prescribed by ANERT along with a copy of the confirmed work order from the beneficiary, within the stipulated period.
- 1.6 The installation has to be completed and the actual project completion report in MNRE format has to be submitted to ANERT district office within 45 days of receiving the work order from the beneficiary.
- 1.7 Beneficiary share shall be collected by the empanelled agency as per mutually agreed terms and conditions. The payment shall be in the mode of account payee cheque/ DD in favour of the empanelled agency. No other mode of payment in favour of dealer or any other name is allowed.
- 1.8 The installation will be verified for compliance and the subsidy due to the beneficiary will be released by ANERT on receiving project completion report and verification certificate. ANERT shall complete inspection and release of subsidy within a period of 2 months from the date of submission of project completion report with all necessary documents to concerned ANERT district office. Subsidy normally due to the beneficiary will be released to the Empanelled Agency that installed the system, based on the authorisation letter from the beneficiary. The beneficiary share of the cost of the system (over and above the subsidy) will be directly paid by the beneficiary to the Empanelled Agency.

2. SCOPE OF WORK

- 2.1 On empanelment, the Empanelled Agency of ANERT may be required to provide a familiarisation session, if so found necessary, for the officers of ANERT regarding their water pumps and its components.
- 2.2 On receiving enquiry from beneficiary, the Empanelled Agency has to visit the site and do a feasibility assessment. If found feasible and on beneficiary issuing the

work order, the Empanelled Agency shall forward a copy of the work order along with the pre-installation report to ANERT.

- 2.3 The installation of the system has to be completed and the system commissioned within 45 days of receiving work order.
- 2.4 The specifications and conditions of installation /warranty have to be complied with.
- 2.5 Any complaint or service call from the beneficiary has to be attended within 48 hours and problems cleared within 4 days.
- 2.6 An agreement for maintenance at specified service levels has to be entered into by the Agency with the beneficiary. Name of Technical person and contact No. should be given to the beneficiary.
- 2.7 Any delays/non-conformance to service levels shall invite penalties, which shall be deducted from the security deposit.
- 2.8 Empanelled Agency has to provide the list of authorised signatory for the districts/state and authorisation letters to be submitted in original.
- 2.9 On completion of the work, the empanelled agency shall submit 3 sets of “ Project completion report in MNRE format(Part A and Part B) ” along with copies of Invoice, Original colour photographs, Test certificate of components ,List of serial No. of modules installed in the system etc (As prescribed by MNRE) to ANERT District offices which will include drawings of various systems containing details of installation from the point of view of future maintenance of the installed systems. This report must also contain all Technical Details, Detailed Circuit Diagram of the Electronic/ Electrical/Motor components of all the system. The report shall include satisfactory performance report from beneficiary for each site along with photograph of representative of the Agency and the beneficiary with pumpset.
- 2.10 Fulfilment of various requirements, not particularly mentioned in the specifications or drawings but necessary for satisfactory and proper completion of the work shall be the empanelled agency's responsibility within the prices offered by him. But additional works beyond the scope and essence of this contract shall be carried out by the empanelled agency as extra items. For such works the rates shall be decided by ANERT and shall be binding on the empanelled agency.
- 2.11 The empanelled agency shall not display the photographs of the work and not take advantage through publicity of the work without written permission of ANERT.
- 2.12 The empanelled agency shall not make any other use of any of the documents or information of this contract, except for the purposes of performing the contract.

3. ROLE OF ANERT

- 3.1 Overall implementation of the Programme

- 3.2 Selection of beneficiaries and allotment of solar water pumps under the programme
- 3.3 Empanelment of manufacturers/ system integrators for execution of the work
- 3.4 Monitoring, inspection/ verification
- 3.5 Release of subsidy amounts
- 3.6 Ensuring the compliance of the warranty conditions, liability of ANERT limited to the security deposit of the Empanelled Agency with ANERT.

4. Instructions to Bidders

- 4.1 Bidders must submit their bids (part I, part II , part III) as stated in this bid procedure in each hard bound book form properly page numbered and Indexed. **Loose or separate papers will not be accepted. Submission of loose papers or separate papers shall lead to the rejection of the same.**
- 4.2 Bids received late due to postal delay or otherwise **will not be considered.**
- 4.3 During the warranty period, MNRE/ State Agencies/ Users reserve the right to cross check the performance of the systems with the minimum performance levels specified in the MNRE/ANERT specifications.
- 4.4 It is the responsibility of every bidder to visit ANERT website regularly for any clarification/modification regarding the tender documents.
- 4.5 If any information/clarification on any condition of this documents is required the bidder may send queries to manoharan@anert.in.

I.D – Bidding Procedure

5. BID DOCUMENT

- 5.1 Bid documents can be downloaded from the website of ANERT (www.anert.gov.in). The bid document is in 3 parts, and has to be submitted in 3 separate envelopes as specified herein.

6. BID SUBMISSION

- 6.1 Bids shall be submitted in three envelopes named:
- i) Part-I – Envelope-A – Pre-qualification
 - ii) Part-II – Envelope-B – Technical bid
 - iii) Part-III – Envelope-C – Financial bid
- 6.2 If the bid does not contain the offer in 3 separate sealed envelopes as specified below, the bid will be summarily rejected.
- 6.3 Wherever necessary, the formats given may be prepared in separate sheets and attached with the submission. These attachments should be clearly indicated (with flags) in the main document (downloaded form).
- 6.4 Part-I (Pre qualification) and Part-II (Technical bid) should be submitted separately in respective covers, serially numbered and tagged or filed as a bundle with Index and flagged in order.

7. PART-I – PRE-QUALIFICATION CRITERIA

- 7.1 The Agency should be an approved Channel Partner of MNRE for Off-Grid Solar Photovoltaic applications, with valid accreditation as on last date of submission of this EoI (attested copy of Certificate from MNRE has to be submitted)
- 7.2 The Agency should have a valid CST/VAT/TIN registration certificate (attested Copy has to be enclosed)
- 7.3 The Agency should submit the application fee of Rs.25000/- (Rupees Twenty Five Thousand Only) as DD in favour of Director ANERT payable at Trivandrum
- 7.4 Registration certificate of the firm which is issued by registrar of companies or other competent authority under which firm is registered. The details of the bidder should match with registration certificate.

Envelope-A

7.5 Envelope-A shall contain:

1. Covering letter for submission as per format (given in page 3) on firm's letterhead
2. Application fee of Rs.25000/-(Rupees Twenty Five Thousand Only) as DD in favour of Director ANERT payable at Thiruvananthapuram.
3. Attested copy of proof of the bidder being approved Channel Partner of MNRE for Off-Grid Solar Photovoltaic applications with valid accreditation as on last date of submission of this EoI
4. Attested copy of valid CST/VAT/TIN registration certificate.
5. Attested copy of registration certificate issued by registrar companies or other competitive authority under which the firm is registered.
6. Certificate in letter head of the agency regarding the experience and financial criteria.
7. Details of General particulars of bidder as per annexure IF
8. Part-I of the document downloaded from website, duly filled and signed by the bidder on all pages.
9. Details of documents submitted as per annexure IG

7.6 If the envelope A does not contain the requisite as above (9 documents) the bid will be summarily rejected. The documents attached should be arranged in the above order with flags to identify the documents easily.

7.7 Only offers that meet the above criteria shall be considered for technical evaluation.

8. TECHNICAL QUALIFICATION CRITERIA

8.1 **The minimum average annual turnover required is Rs.1 crore for any of the last three years** (Certified Documentary proof has to be submitted). Audited statement of the accounts of the company certified by chartered account only will be considered.

8.2 The system installed should conform to the minimum technical configuration and sizing proposed in the technical specification sheet proposed for this programme (undertaking by the agency to be submitted as per Annexure II-D).

8.3 All the components of the system should comply with the minimum technical requirements of the off-grid solar photovoltaic water pumping scheme of MNRE.

Technical compliance certificate from the approved laboratory of MNRE to be submitted for the models and brands proposed.

- 8.4 Agency should provide an undertaking that they have resources and capability to supply and install not less than 50 solar water pumps under this programme.
- 8.5 If the agency is not the manufacturer of the components such as solar PV modules or Pump Sets or power conditioning unit (inverter/ charge controller) or VFD or Electronics controller. The copy of the agreement in stamp paper worth Rs.100/- (Rupees Hundred Only) regarding supply, support and warranty from the respective manufactures for at least for 5 years from the date of installation should be submitted.
- 8.6 Agency should have at least three regional service centres in the North, South and Central regions of Kerala. A service agreement in the given format along with Copy of MOU/ Agreement with the service centres has to be submitted. Failure to fulfil this will make them ineligible from getting included in the list of Empanelled Agencies.
- 8.7 The Agency should have completed at least 25 installations of solar water pumping systems. Only solar water pumps of capacity 900 W_p and above would be considered for this. The list of installed systems should be provided in the enclosed format (Annexure II-C) along with certificate of satisfactory performance issued by the user.**

Envelope-B

8.8 Envelope-B shall contain:

- 1) Technical bid submission form (Format II-B) fully filled and signed by the bidder on all pages.
- 2) Attested Copy of PAN
- 3) Authorisation or power of attorney as authorised signatory.
- 4) Proof of Annual Turnover as required (Audited statement of accounts certified by a chartered accountant)
- 5) Proof of Satisfactory performance from Beneficiary for the installation of similar type of solar water pumps along with details of installation in Annexure II-C
- 6) Test compliance certificates for complete solar water pumping systems from MNRE approved test centres as per MNRE specification for each model of pump set. Certificate should be complete and valid as on date of submission.
- 7) Undertaking regarding service centres in stamp paper worth Rs.100/- (There should be at least three regional service centres North, South and Central regions of Kerala) along with documentary

evidence such as MoU, Agreement with service centres (Annexure-II E)

8) Part-II of the downloaded bid document duly filled and signed by the bidder on all pages.

9) Declaration by the Agency as per Annexure II-D.

10) Addendum to this document, if any published by ANERT.

8.9 If any of the applicants indicate price in Envelopes A or B, the bid will be summarily rejected. If the technical information submission form of each model solar pump (fully filled) is not included in Envelope-B, the bid will be rejected.

8.10 Only offers that meet the above criteria shall be considered for financial evaluation.

8.11 Director, ANERT reserves the right to seek clarification/additional details from any or all of those who turn successful in the pre-qualification stage.

9. FINANCIAL BID DETAILS

9.1 Lowest quoted 10 agencies only will be considered for empanelment of particular model of pump set.

9.2 Only one price should be quoted for each model of the solar water pumps. If more than one price is seen quoted for different variants of a given configuration, the lowest price only will be taken. Price quoted should be all inclusive.

9.3 The price quoted by the bidder for each configuration shall be all inclusive of taxes and duties, and shall cover the pre-installation survey and report, transportation, handling charges, supply, installation, commissioning and 5 year comprehensive warranty and maintenance of a standard installation. If the distance from the pump(shallow-well)/well top(submersible) to module exceeds 15m, the additional expenses relating to cabling, conduit and structures may be charged from beneficiary.

9.4 The collection of the beneficiary share of the system cost (over and above the subsidy) and the warranty agreement for the system shall be between the beneficiary and the Empanelled Agency that supplied, installed and commissioned the system. ANERT will not be responsible for delays in payment of beneficiary share by the beneficiary. If the Empanelled Agency with whom the beneficiary has placed orders fails to execute the order within the specified time, the beneficiary will have the right to cancel the contract or a part thereof, and if so desired, purchase or authorise the purchase of the stores not delivered or others of similar description at the risk and cost of the Empanelled Agency.

9.5 The Empanelled Agency shall not claim any subsidy from MNRE under this scheme. An undertaking to this effect has to be submitted with each completion

report/ subsidy claim. ANERT shall submit all the subsidy claim details under this programme to MNRE.

Envelope-C

- 9.6 Envelope-C shall contain the Price Schedule as per Part-III of this document, duly signed.
- 9.7 The submissions 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

<u>Envelope - A (Part-I)-Prequalification</u> Notification no. 10900/ANERT/TO/2014 Dated 24 th DEC 2014 <u>Expression of Interest for empanelment as Agency for</u> <u>SPV Water Pumping Programme</u>	
<i>[name and address of Agency]</i>	To DIRECTOR, ANERT

<u>Envelope - B (Part -II)-Technical Bid</u> Notification no. 10900/ANERT/TO/2014 Dated 24 th DEC 2014 <u>Expression of Interest for empanelment as Agency for</u> <u>SPV Water Pumping Programme</u>	
<i>[name and address of bidder]</i>	To DIRECTOR, ANERT

<u>Envelope - C (Part -III)-Price Bid</u> Notification no. 10900/ANERT/TO/2014 Dated 24 th DEC 2014 <u>Expression of Interest for empanelment as Agency for</u> <u>SPV Water Pumping Programme</u>	
<i>[name and address of bidder]</i>	To DIRECTOR, ANERT

All these three sealed covers shall be put in another cover and sealed, with superscription as follows:

Notification no. 10900/ANERT/TO/2014 Dated 24 th DEC 2014 <u>Expression of Interest for empanelment as Agency for</u> <u>SPV Water Pumping Programme</u>	
<i>[name and address of bidder]</i>	To DIRECTOR, ANERT, PMG, Vikas Bhavan PO, Thiruvananthapuram 695 033

I.E – Empanelment Procedure

10. STEPS OF EMPANELMENT

ANERT is planning to install 1380 numbers of Solar Water Pumps for irrigation and drinking water all over Kerala.

- 10.1 Expression of interest from pre-qualified agencies (agencies that satisfy prequalification criteria) as decided by ANERT will be invited.
- 10.2 The notification for expression of interest will be made available on ANERT website and through newspaper advertisement.
- 10.3 All the MNRE channel partners with valid accreditation for off-grid solar photovoltaic programme under JNNISM are eligible for participating in the empanelment process.
- 10.4 Only one price should be quoted for each model. Price quoted should be all inclusive.
- 10.5 The qualified Agencies have to submit security deposit of Rs. 5, 00,000/- as bank guarantee for being eligible to install up to 25 nos. of solar water pumps.
- 10.6 The validity period of bank guarantee per lot of 25 pump sets will be 5 years from the date of commissioning of the last pump set installed by them in that particular lot.
- 10.7 The qualified agencies shall also enter into an agreement (on Kerala Stamp Paper) with ANERT agreeing to participate in this project as per the conditions
- 10.8 The Empanelled Agencies will become eligible for installation of solar water pumping systems in batches of 25 nos. at a time. To become eligible they have to submit security deposit of Rs.5,00,000/- (Rupees five lakh only) as bank guarantee, per batch of 25 nos. The validity period of bank guarantee will be 5 years.
- 10.9 Eligibility of 25 nos. doesn't mean the firm is allotted with 25 nos. of pumps but the maximum capacity that they can install is 25 nos. with the remitted security deposit. For becoming eligible for further installations, the firm has to submit new bank guarantee, or else it will affect the release of subsidy.
- 10.10 The payment of the beneficiary share of the system cost and the warranty agreement for the system shall be between the beneficiary and the Empanelled Agency that supplied, installed and commissioned the system.
- 10.11 The subsidy due to the beneficiary shall be based on the model and price selected by the beneficiary and installed by the Empanelled Agency, from the list provided from ANERT.

- 10.12 In the event of the bidder not getting full orders in the lot of 25 allotted, the proportional amount of security deposit would be returned, after the closure of the project.
- 10.13 The Empanelled Agency can be removed from the list at any time by ANERT and the details published on ANERT website. This can be due to reasons including but not limited to losing/ end of validity of MNRE channel partner status, non-adherence to the conditions of empanelment, valid complaints of selective refusal to accept work orders from beneficiaries, etc.
- 10.14 Tentative dates and stages of the empanelment procedure is summarised as follows:

1)	Date of notification inviting expression of interest	24.12 2014
2)	Date and time of submission of Eol	31.01.2015 at 12 noon
3)	Date and time of opening of Technical Bid	31.01.2015 at 3 pm

- 10.15 Director, ANERT reserves the right to add, remove, and clarify any of the terms and conditions contained herein.
- 10.16 Director, ANERT has the right to accept any Eol in total or in part
- 10.17 The respective suppliers shall pay all the expenses of stamp duties and other requirements for signing the agreement with ANERT
- 10.18 Any changes/ updates in MNRE guidelines will be binding on all the stakeholders.
- 10.19 All the lists/ announcements including dates related to the empanelment process, stated above will be published on ANERT's website (www.anert.gov.in) and ANERT will not be responsible for delays or non-receipt of individual communications in this regard, if any.
- 10.20 Any addendum published for this EOI document, also will form part of the EOI bid document. The bidder should download it, print it, and submit it in Envelope-B, with signature on all pages by the authorised signatory of the bidder.
- 10.21 The Eol must contain the name and places of business of the firm/person/persons participating in the Eol and must be signed and sealed by the Bidder with his usual signature. The name and designation of all persons signing the Eol document should be written below every signature. Eol by a partnership firm must be furnished with full name of all partners with a copy of partnership deed
- 10.22 The original copy of the Eol must be signed with the legal name of the corporation/ company by the President/ Managing Director/ Secretary of the firm or a person duly authorized to bid. In case of authorized person the letter of authorization by written power-of-attorney should be enclosed with the technical bid of the Eol. The person or persons signing the Eol shall initial all pages of the Eol document.

10. GENERAL TERMS AND CONDITIONS

A complete list of Bill of Materials as per annexure II-D shall be provided along with the offer. The numbers of each component proposed for supply shall be clearly specified. The bill of materials shall include HDPE Pipes (PE 100 Grade) of required capacity and grade with suitable length and cable as per BIS standards with suitable current carrying capacity and length.

10.1 Spare Parts

Bidder shall keep stock of essential spares at their nearest service centre and/or at each site at their cost for five years maintenance. **Bidder should supply minimum 5% of essential consumable spares to ANERT HQ.** A recommended list of such spares shall be provided with the offer.

10.2 Installation and commissioning

- Detailed project execution plan shall be submitted along with the offer.
- The bidder shall quote for Installation and commissioning.

The bidder is responsible for arranging all the accessories and measuring instruments required to smoothly commission the system.

10.3 Packing, Shipping and Marking

The bidder shall be responsible for assuring that all commodities shipped are properly packed and protected to prevent damage or deterioration during shipment. Packaging and shipping costs shall be borne by the supplier. Customs clearance and all costs and actions associated with import duties, taxes and processing of documents within India are to be borne by the bidder.

10.4 Insurance

The bidder shall provide insurance coverage ex-factory until commissioning, and acceptance for replacement or repair of any part of the consignment due to damage or loss.

10.5 Delivery

The bidder shall indicate delivery time along with the offer, service centres near the Site on nearest places and ensure that all the essential men and materials are placed to ensure quick and efficient after sales service.

10.6 Training and After Sales Service

Training and after sales service is an important component of supply. Bidder should provide necessary training to Technicians selected by ANERT for the proper maintenance and repair of system after the warranty period. The individual users shall be properly trained on operation and maintenance. State level helpline number, customer care centres and appropriate grievance redressal mechanism should be provided by the empanelled agency

to help in addressing to problems arising from unsatisfactory after sales services, Non-performance of the product and other program implementation issues.

10.7 Repair and Maintenance

- 1) The Comprehensive Maintenance (within warranty period) shall be executed by the firm themselves or the authorized dealer/ service center of the firm in the concerned district/Regional service centre.
- 2) It is mandatory for the bidder to open an authorized service center in the concerned district/Region before the supply/installation of the system.
- 3) The supplier shall be responsible to replace free of cost (including transportation and insurance expenses) to the purchaser whole or any part of supply which under normal and proper use become dysfunctional within one month of issue of any such complaint by the purchaser within warranty period.

I.F – General particulars of the Bidder

SL NO	PARTICULARS	DETAIL
1	Name of Bidder/Firm (Copy of registration certificate to be enclosed)	
2	Postal Address	
3	Name of authorized signatory(power of attorney to be enclosed)	
4	Designation of the authorized signatory	
4	E-mail address for communication	
5	Telephone, Fax No.	
6	Name, designation & contact number of the representative of the Bidder to whom all references shall be made.	
7	Nature of the firm (Individual/ Partnership/Consortium/ Pvt. Ltd /Public ltd. Co. /Public Sector etc.) Attach attested copy of Registration & Partnership deed/ Memorandum of Association	
8	Name and address of the Indian/foreign collaboration if any.	
9	PAN No., Service Tax Registration No., Kerala VAT/TIN/GRN No., CST No. (evidences are to be attached).	
10	Has the Bidder/firm ever been debarred by any institution for undertaking any work	
11	Any other information attached by the Bidder (Details and Annexure / page no. where its enclosed	
12	Does the Bidder have any relative Working in ANERT? If yes, state the Name and designation	
13	No. of service centers in Kerala, Region wise	North, South and Central

Date

(Office Seal)

Signature of the authorised signatory

Name

Designation

I.G – CHECK LIST

Details of document submitted in Envelop A (Pre-qualification)

Sl. no	Documents Required	Page No:	
		From	To
1	Covering letter for submission as per format (given in page 3) on firm's letterhead		
2	Application fee of Rs.25000/- (Rupees Twenty Five Thousand Only) as DD in favour of Director ANERT payable at Thiruvananthapuram		
3	Attested copy of proof of the bidder being approved Channel Partner of MNRE for Off-Grid Solar Photovoltaic applications with valid accreditation as on last date of submission of this EoI		
4	Attested copy of valid CST/VAT/TIN registration certificate		
5	Attested copy of registration certificate issued by registrar companies or other competitive authority under which the firm is registered.		
6	Certificate in letter head of the agency regarding the experience and financial criteria.		
7	Details of particulars of bidder as per annexure IF		
8	Part-I of the document downloaded from website, duly filled and signed by the bidder on all pages.		

Details of document submitted in Envelop B (Technical Qualification Criteria)

Sl.no	Documents Required	Page No:	
		From	To
1	Attested Copy of PAN		
2	Authorisation or power of attorney as authorised signatory.		
3	Proof of Annual Turnover as required (Audited statement of accounts certified by a chartered accountant)		
4	Proof of Satisfactory performance from Beneficiary for the installation of 25 solar water pumps along with details of installation in Annexure II-C		
5	a)Test compliance certificates for complete solar water pumping systems from MNRE approved test centres as per MNRE specification for each model of pump set. Certificate should be complete and valid as on date of submission. b)IEC test certificates of modules		
6	Undertaking regarding service centres in stamp paper worth Rs.100/- (There should be at least three regional service centres North, South and Central regions of Kerala) along with documentary evidence such as MoU, Agreement with service centres (Annexure-II E)		
7	Part-II of the downloaded bid document duly filled and signed by the bidder on all pages.		
9	Declaration by the Agency as per Annexure II-D.		
10	Addendum to this document, if any published by ANERT.		

Note:- The page number should be given to all documents including attachments.

Invitation of Expression of Interest for Empanelment of Manufacturers/ System Integrators for Supply, Installation & Commissioning of SPV Water Pumping Systems in all over Kerala

*Notification No10900/ANERT/TO/2014
Dated 24th DEC 2014*

PART-II

Submitted by _____ :
(name and address of bidder)



Agency for Non-conventional Energy & Rural Technology

TC No. 12/1446(1), 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:** director@anert.in

II.A – Technical Requirements

11.SPECIFICATIONS OF SOLAR PHOTOVOLTAIC WATER PUMPING SYSTEMS

11.1 INTRODUCTION

A solar photovoltaic (SPV) water pumping system consists of:

- **PV array**
 - 1) Capacity in the range of 900 Watt to 5 KWp .
 - 2) Should be mounted on a suitable structure with a provision of tracking the sun
- **Motor Pump Set (Surface or submersible)**
 - 1) D.C. Motor Pump Set (with Brushes or Brush less D.C.)
OR
 - 2) A.C. Induction Motor Pump set with a suitable Inverter/VFD
- **Electronics**
 - 1) Maximum Power Point Tracker (MPPT)
 - 2) Controls and Protections.
- **Interconnect Cables and “On-Off” switch**

11.2 BROAD PERFORMANCE PARAMETERS

11.2.1. Technical Specifications of Shallow Well (Surface) Solar Pumping Systems With D.C. Motor Pump Set with Brushes or Brush Less D.C.(B.L.D.C.)

Description	Model-I	Model-II	Model-III
PV array	900 Wp	1800 Wp	2700 Wp
Motor capacity	1 HP	2 HP	3 HP
Shut Off Dynamic Head	12 meters	15 meters	25metres
Module mounting structure	MS hot dipped galvanized, at least three times manual tracking facilities	MS hot dipped galvanized, at least three times manual tracking facilities	MS hot dipped galvanized, at least three times manual tracking facilities
Water Output*	90,000 liters per day from a total head of 10 meters	1,80,000 liters per day from a total head of 10 meters	1,48,000 liters per day from a total head of 20 meters

*Water output figures are on a clear sunny day with three times tracking of SPV panel, under the “Average Daily Solar Radiation” condition of 7.15 KWh/ sq.m on the surface of PV array (i.e. coplanar with the PV Modules).

11.2.2. Technical Specifications of Solar Deep well (submersible) Pumping Systems With D.C. Motor Pump Set with Brushes or Brush Less D.C.(B.L.D.C.)

Description	Model-I	Model-II	Model-III	Model IV
PV array	1200 Wp	1800 Wp	3000 Wp	4800 Wp
Motor capacity	1 HP	2 HP	3 HP	5HP
Motor pump set type	Submersible with electronic controller	Submersible With electronic controller	Submersible with electronic controller	Submersible with electronic controller
Maximum total dynamic head	45 Meters	45 Meters	70 Meters	70 Meters
Module mounting structure	MS hot dipped Galvanized at least three times manual tracking facilities	MS hot dipped galvanized, at least three times manual tracking facilities	MS hot dipped galvanized, at least three times manual tracking facilities	MS hot dipped galvanized, at least three times manual tracking facilities
Water Output*	42,000 Liters per day from a total head of 30m	63,000 liters per day from a total head of 30m	63,000 liters per day from a total head of 50m	1,00,000 liters per day from a total head of 50m

* Water output figures are on a clear sunny day with three times tracking of SPV panel, under the "Average Daily Solar Radiation" condition of 7.15 KWh/ sq.m. on the surface of PV array (i.e. coplanar with the PV modules)

11.2.3. Technical Specifications of Shallow Well (Surface) Solar Pumping Systems with A.C. Induction Motor Pump Set and a suitable Inverter

Description	Model-I	Model-II	Model-III
PV array	900 Wp	1800 Wp	2700 Wp
Motor capacity	1 HP	2 HP	3 HP
Shut Off Dynamic Head	12 meters	15 meters	25 meters
Module mounting Structure	MS hot dipped Galvanized at least three times manual tracking facilities	MS hot dipped Galvanized at least three times manual tracking facilities	MS hot dipped Galvanized at least three times manual tracking facilities
Water Output*	81,000 liters per day from a total head of 10 meters	1,62,000 liters per day from a total head of 10 meters	1,35,000 litter per day from a total head of 20 meters

* Water output figures are on a clear sunny day with three times tracking of SPV panel, under the "Average Daily Solar Radiation" condition of 7.15 KWh/ sq.m on surface of PV array (i.e. coplanar with the PV Modules)

11.2.4. Indicative Technical Specifications of Solar Deep well (submersible) Pumping Systems with A.C. Induction Motor Pump Set and a suitable Inverter

Description	Model I	Model II	Model III	Model IV
PV array	1200 Wp	1800 Wp	3000 Wp	4800 Wp
Motor capacity	1 HP	2 HP	3 HP	5HP
Motor pump set type	Submersible with electronic controller	Submersible with electronic controller	Submersible with electronic controller	Submersible with electronic controller
Max. total dynamic head	45 Meters	45 meters	70 Meters	70 Meters
Module mounting structure	MS hot dipped galvanized, three times manual tracking facilities	MS hot dipped galvanized, three times manual tracking facilities	MS hot dipped galvanized, three times manual tracking facilities	MS hot dipped galvanized, three times manual tracking facilities
Water Output*	38,000 Liters per day from a total head of 30 meters	38,000 Liters per day from a total head of 30 meters	38,000 Liters per day from a total head of 30 meters	38,000 Liters per day from a total head of 30 meters

* Water output figures are on a clear sunny day with three times tracking of SPV panel, under the “Average Daily Solar Radiation” condition of 7.15 KWh/ sq.m.on the surface of PV array (i.e. coplanar with the PV Modules).

11.3. PERFORMANCE SPECIFICATION AND REQUIREMENT (DUTY CYCLE)

Suction head if applicable should be minimum 7 meters. If submersible pumps are used in lieu of surface pumps, the water output must match that of the surface pumps as specified in this table. For Higher or lower head/PV capacity or in between various models ,water output could be decided as follow

Under the “Average Daily Solar Radiation” condition of 7.15 KWh/ sq.m. on the surface of PV array (i.e. coplanar with the PV Modules), the minimum water output from a Solar PV Water Pumping System at different “Total Dynamic Heads” should be as specified below

11.3.1 For D.C. Motor Pump Set with Brushes or Brush Less D.C.(B.L.D.C.) :

- 1) 100 liters of water per watt peak of PV array, from a Total Dynamic Head of 10 meters (Suction head, if applicable, minimum of 7 meters) and with the shut off head being at least 12 meters.
- 2) 55 liters of water per watt peak of PV array, from a Total Dynamic Head of 20 meters (Suction head, if applicable, up to a maximum of 7 meters) and with the shut off head being at least 25 meters.
- 3) 35 liters of water per watt peak of PV array, from a Total Dynamic Head of 30 meters and the shut off head being at least 45 meters.
- 4) 21 liters of water per watt peak of PV array, from a Total Dynamic Head of 50 meters and the shut off head being at least 70 meters.
- 5) 14 liters of water per watt peak of PV array, from a Total Dynamic Head of 70 meters and the shut off head being at least 100 meters.

- 6) The actual duration of pumping of water on a particular day and the quantity of water pumped could vary depending on the solar intensity, location, season, etc.

11.3.2 For A.C. Induction Motor Pump set with a suitable Inverter:

- 1) 90 liters of water per watt peak of PV array, from a Total Dynamic Head of 10 meters (Suction head, if applicable, minimum of 7 meters) and with the shut off head being at least 12 meters.
- 2) 50 liters of water per watt peak of PV array, from a Total Dynamic Head of 20 Meters (Suction head, if applicable, up to a maximum of 7 meters) and with the shut off head being at least 25 meters.
- 3) 32 liters of water per watt peak of PV array, from a Total Dynamic Head of 30 meters and the shut off head being at least 45 meters.
- 4) 19 liters of water per watt peak of PV array, from a Total Dynamic Head of 50 meters and the shut off head being at least 70 meters.
- 5) 13 liters of water per watt peak of PV array, from a Total Dynamic Head of 70 meters and the shut off head being at least 100 meters.

The actual duration of pumping of water on a particular day and the quantity of water pumped could vary depending on the solar intensity, location, season, etc.

11.4. MOTOR PUMP SET

- 1) The SPV water pumping systems may use any of the following types of motor pump sets:
 1. Surface mounted motor pump-set
 2. Submersible motor pump set
 3. Floating motor pump set
 4. Any other type of motor pump set after approval from Test Centers of the ministry
- 2) Motor Pump Set should have a capacity in the range of 1 HP to 5 HP.
- 3) The pump should be appropriately tested and certified by the authorized test centres of the MNRE to meet the performance and water discharge norms specified by MNRE
- 4) The mono block DC/ AC centrifugal motor pump set has its driving unit and impeller mounted on a common shaft, thereby giving it a perfect alignment. The pump should be provided with specially developed mechanical seals which ensure zero leakage.
- 5) The motor is of 1-5 HP having spring loaded carbon brushes in case of D.C. Motor Pump Sets. The suction and delivery head will depend on the site specific condition of the field. Submersible pump can also be used according to the technical need of the particular case.
- 6) The features include the suction/ delivery pipe (HDPE), electric cables, floating assembly, civil work and other fittings required to install the system
- 7) The water output of the pump must qualify the specifications of the solar pumping program of the MNRE
- 8) Solar PV water pump with PV array capacity in the range of 900Wp to 5 kWp could be installed on suitable bore well, water reservoir, open well or water stream etc

- 9) The following details should be marked indelibly on the motor pump set
 - a) Name of the Manufacturer or Distinctive Logo
 - b) Model Number
 - c) Serial Number

11.5. PV ARRAY

- 1) The SPV water pumping system should be operated with a PV array capacity in the range of 900 Watts peak to 5000 Watts peak, measured under Standard Test Conditions (STC). Sufficient number of modules in series and parallel could be used to obtain the required PV array power output. The power output of individual PV modules used in the PV array, under STC, should be a minimum of 74 Watts peak, with adequate provision for measurement tolerances. Use of PV modules with higher power output is preferred.
- 2) Indigenously produced PV module (s) containing mono/ multi crystalline silicon solar cells should be used in the PV array for the SPV Water Pumping systems.
- 3) Modules supplied with the SPV water pumping systems should have certificate as per IEC 61215 specifications.
- 4) Modules must qualify to IEC 61730 Part I and II for safety qualification testing
- 5) The efficiency of solar module should be minimum 14% and fill factor should more than 70%
- 6) The terminal box on the module should have a provision for opening for replacing the cable, if required.
- 7) There should be a Name Plate **fixed inside** the module which will give:
 1. Name of the Manufacturer or Distinctive Logo
 2. Model Number
 3. Serial Number
 4. Year of manufacture
- 8) Each PV module used must use a RF identification tag (RFID)

11.6. ELECTRONIC AND PROTECTIONS

- 1) Maximum Power Point Tracker (MPPT) should be included to optimally use the Solar panel and maximize the water discharge
- 2) Inverter could be used, if required, to operate an A.C. Pump.
- 3) Adequate protections should be incorporated against dry operation of motor pump set, lightning, hails and storms. Full protection against open circuit, accidental short circuit and reverse polarity should be provided.

11.7. MOUNTING STRUCTURE AND TRACKING SYSTEM

- 1) The PV modules should be mounted on metallic structures of adequate strength and appropriate design, which can withstand load of modules and high wind velocities up to 150 km per hour. The support structure used in the pumping system should be Hot Dip Galvanized Iron with minimum 80 micron thickness.
- 2) To enhance the performance of SPV water pumping systems, manual or passive or auto tracking system must be used. **For manual tracking, arrangement for**

seasonal tilt angle adjustment and three times manual tracking in a day should be provided.

11.8. ON/OFF SWITCH

- 1) A good reliable switch suitable for DC / AC use is to be provided with the motor pump set. Sufficient length of cable should be provided for inter-connection between the PV array and the motor pump set.

11.9. PERFORMANCE SPECIFICATION AND WARRANTY



- 1) The PV Modules must be warranted for output wattage, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years
- 2) The whole system including mechanical structures, electrical components including Motor-Pump Set and overall workmanship of the Solar Water Pumping System must be warranted for a minimum of 5 years
- 3) Required Spares for trouble free operation during the Warrantee period should be provided along with the system.
- 4) A warranty card for the modules and the motor pump set should also be provided to the beneficiary

11.10 MONITORING MECHANISAM

- 1) A GPRS based remote data logging system should be installed with solar pumping system. The information should be accessible to ANERT through internet/web interface. The agency should maintain the internet connectivity through GPRS for the remote monitoring system

11.11 OTHER FEATURES

1. Necessary lengths of wires / cables and fuse should be provided
2. All cables supplied should have proper current carrying capacity
3. Selected cable should carry a current density of minimum 1.2 A/sq.mm.
4. Quality stickers with slogans and other information will have to be pasted on the Components as instructed by ANERT Engineer.
5. The following matter should be displayed prominently with size not less than 60X 30 cm by indelibly embossing on PV array supporting structure with fluorescent paint

	SOLAR WATER PUMPING PROGRAMME 2014-15	
A PROJECT JOINTLY IMPLEMENTED BY MNRE (Govt of India) & ANERT (Govt of Kerala)		
<input type="text"/>	<input type="text"/>	<input type="text"/>
Registration Number	System Number	Date of Commissioning
Name of Agency Installed and Commissioned		
<input type="text"/>		
Helpline No:		

6. State level helpline number, customer care centres and appropriate grievance redressal mechanism should be provided by the empanelled agency to help in addressing to problems arising from unsatisfactory after sales services, Non-performance of the product and other program implementation issues

11.12 OPERATION AND MAINTENANCE MANUAL

- 1) An Operation and Maintenance Manual, in English and Malayalam, should be provided with the solar PV pumping system.
- 2) The Manual should have information about
 - a. Solar Energy
 - b. Photovoltaic Module
 - c. DC/AC Motor Pump Set
 - d. Tracking System
 - e. Mounting Structures
 - f. Electronics and Switches.
- 3) It should also have clear instructions about mounting of PV module, DO's and DONT's and on regular maintenance and Trouble Shooting of the pumping system.
- 4) Name, address and contact number of the person or Centre to be contacted in case of failure or complaint should also be provided.
- 5) **I-V curves of all modules, Inverter manual and warranty card of the system should be handed over to the Beneficiary**

11.13 NOTES

- 1) Wherever the "Water table" or the level of water in the reservoir or the water source (e.g. Diggee) from which the water is to be pumped, is within 10 metres depth, 'Surface Motor Pump sets" should be preferred.
- 2) The type of pump set used must match the total dynamic head requirement of the site (i.e. the location at which it is installed). Moreover, it should be appropriately tested and certified by the authorized test centers of the Ministry to meet the performance and water discharge norms specified in technical specification
- 3) The beneficiary may select an appropriate Model (i. e. Capacity of PV Array and Type of Motor Pump Set) as per site requirement.

II.B – Technical Information Submission Form

(To be filled in by bidder)

(1)	Solar Module:	DETAILS
1.1	Type and source of Solar Cell (Mono/Multi) :	
1.2	Make and Model No	
1.3	Wattage	
1.4	Fill Factor	
1.5	Module efficiency	
1.6	IEC certificate no., date of issue, validity and agency(For IEC 61215 and IEC 61730	
(2)	MOTOR-PUMP SETS- AC MODEL	
2.1	Surface Mount(Shallow well) Type	
2.1.1	MODEL 1	
	Make and Model of pump : Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and suction head in meters:	
	Water Output(Litres/day from a total head of 10m)	
2.1.2	MODEL 2	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and suction head in meters:	
	Water Output(Litres/day from a total head of 10m)	
2.1.3	MODEL 3	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and suction head in meters:	
	Water Output(Litres/day from a total head of 20m)	

2.2	Submersible Type	
2.2.1	MODEL 1	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and Max. total dynamic head:	
	Water Output(Litres/day from a total head of 30m)	
2.2.2	MODEL 2	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and Max. total dynamic head:	
	Water Output(Litres/day from a total head of 30m)	
2.2.3	MODEL 3	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and Max. total dynamic head:	
	Water Output(Litres/day from a total head of 30m)	
2.2.4	MODEL 4	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and Max. total dynamic head:	
	Water Output(Litres/day from a total head of 30m)	

3		MOTOR-PUMP SETS- DC MODEL
3.1	Surface Mount (Shallow well) Type	
3.1.1	MODEL 1	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and suction head in meters:	
	Water Output(Litres/day from a total head of 10m)	
3.1.2	MODEL 2	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and suction head in meters:	
	Water Output(Litres/day from a total head of 10m)	
3.1.3	MODEL 3	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and suction head in meters:	
	Water Output(Litres/day from a total head of 20m)	
3.2	Submersible Type	
3.2.1	MODEL 1	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and Max. total dynamic head:	

	Water Output(Litres/day from a total head of 30m)	
3.2.2	MODEL 2	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and Max. total dynamic head:	
	Water Output(Litres/day from a total head of 30m)	
3.2.3	MODEL 3	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and Max. total dynamic head:	
	Water Output(Litres/day from a total head of 50m)	
3.2.4	MODEL 4	
	Make and Model of pump: Details of test certificate(Agency,date of issue and validity)	
	Rating (Voltage and HP) and Max. total dynamic head:	
	Water Output(Litres/day from a total head of 50m)	
(4)	Solar Pump Controller/ Pump Drive/VFD	
4.1	Make and Model :	
4.2	Rating	
(5)	Pipes (HDPE,PE100 Grade)	
	Make	
	size	

(6)	Cables (As per BIS standard)	
	Make and Model	
	Rating	
(7)	Tracking Mechanism	
7.1	Auto /manual - give details	
(8)	Spares	
7.1	List of consumable spares for trouble free operation to be supplied.	

I have read the technical requirements; warranty conditions and the details furnished above are true and correct to my knowledge and belief. All the details furnished are supported by documentary evidence.

Date

Signature of the authorised signatory

Name

Designation

(Office Seal)

NOTE: If more than one make and models of system components are proposed, extra pages may be used.

II-C – Format for Submitting Details of Installed pumps

Sl. No.	Address in Full	Mobile/ Land Phone No. and e-mail	Date of Installation	Capacity of the pump and PV modules installed

It is certified that the details furnished above are true and correct to my knowledge and belief and all the systems are installed by our agency.

Date

Signature of the authorised signatory
Name
Designation

(Office Seal)

II-D– Format for undertaking

I (Name, Designation) authorised signatory of
..... (Name and full
address of the MNRE channel partner) hereby undertake that

1. The system installed under SPV Water Pumping Systems Programme implemented by ANERT shall be as per technical specification stipulated by ANERT. The wiring and installation shall be done as per the recommended installation practices and using components as per the prescribed Technical Specifications.
2. Minimum 50 nos. of solar water pumping systems will be installed under this programme.
3. The whole system supplied and installed should be given warrantee for 5 years. The performance of solar modules supplied should be warranted for 90% of rated output at the end of 10 years and 80% of the rated output at the end of 25 years.
4. The system supplied shall be as per bill of material approved by ANERT
5. List of service centres and service persons submitted are true and correct at the time of submitting document.
- 6. No alteration in the downloaded document is made. If any alterations are detected at any stage, my offer is liable to be rejected.**
7. No subsidy other than from ANERT would be claimed for the systems installed under this Programme
8. All terms and conditions stipulated shall be acceptable to me/us.

Date

Signature of the authorised signatory
Name
Designation

(Office Seal)

Invitation of Expression of Interest for Empanelment of Manufacturers/ System Integrators for Supply, Installation & Commissioning of SPV Water Pumping Systems in all over Kerala

*Notification No10900/ANERT/TO/2014
Dated 24thDEC 2014*

PART-III

Submitted by _____ :
(name and address of bidder)



Agency for Non-conventional Energy & Rural Technology

TC No. 12/1446(1), 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: director@anert.in

III.A – Format for Submitting Financial Bid

Name of the Firm: _____

The Bidders are advised to quote AC or DC model Pump sets or all the models

NAME OF WORK: Supply, Installation, Commissioning, and maintenance of Solar PV Water Pumping Systems for irrigation and drinking water in the state of Kerala including five Years CMC (As defined in the scope of work)

Item		Supply , Installation and commissioning of Complete PV System comprising of SPV Modules, VFD/ Inverter, AC / DC Pump, Mounting structure, Tracking Mechanism, Cables, HDPE pipe etc inclusive of all necessary material required for installation	Installation/ Commissioning/ Services	Total Amount (In figures)	Total Amount (In Words)
DC model	<i>Surface Mount Type</i>	MODEL I			
		MODEL II			
		MODEL III			
	<i>Submersible Type</i>	MODEL I			
		MODEL II			
		MODEL III			
		MODEL IIII			

AC model	<i>Surface Mount Type</i>	MODEL I				
		MODEL II				
		MODEL III				
	<i>Submersible Type</i>	MODEL I				
		MODEL II				
		MODEL III				
		MODEL IIII				

Declaration

1. The price quoted by the bidder shall be all inclusive of taxes and duties, and shall cover the pre-installation survey and report, transportation, handling charges, supply, installation and commissioning and 5 years of comprehensive warranty maintenance of a standard installation.
2. The price quoted also includes the cost of meeting warranty requirements as per the warranty conditions of this project
3. The price quoted is applicable for any location in all fourteen districts of Kerala.

Date

(Office Seal)

Signature of the authorised signatory
Name
Designation