

**EXPRESSION OF INTEREST
FOR
SELECTION AND REGISTRATION OF SOLAR PHOTOVOLTAIC
WATER PUMP SUPPLIERS FOR
SURVEYING, DESIGNING, SUPPLYING, INSTALLATION AND
COMMISSIONING OF
SOLAR PHOTOVOLTAIC WATER PUMP SYSTEM
FOR
“SOLAR PHOTOVOLTAIC WATER PUMPING PROGRAMME”**

IMPLEMENTED BY

**GUJARAT GREEN REVOLUTION COMPANY LTD, VADODARA
ON BEHALF OF MINISTRY OF NEW AND RENEWABLE
ENERGY (GOVT. OF INDIA), NEW DELHI
IN THE GUJARAT STATE**

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INVITATION OF EXPRESSION OF INTEREST (Eoi)

The GUJARAT GREEN REVOLUTION COMPANY LIMITED (GGRC), Vadodara invites Expression of Interest (Eoi) from your firms / company for Surveying, Designing, Supplying, Installation and Commissioning of 1400 numbers of Solar Photovoltaic (SPV) Water Pump system on farmer's field under Solar Water Pumping Programme for Irrigation of Ministry of New And Renewable Energy, New Delhi (Govt. of India) in the Gujarat State.

Eoi NAME: Selection of SPV Water Pump Supplier for "Surveying, Designing, Supplying, Installation and Commissioning of SPV Water Pump system for irrigation on farmers' field".

Issue of Eoi	From 23 th December, 2015
Eoi Submission Date	On or before 18 th January 2016 by 5.00 PM.
Eoi Submission Address:	Joint Managing Director Gujarat Green Revolution Company Ltd. (GGRC) Fertilizernagar Township, PO: Fertilizernagar, Dist: Vadodara- 391750, Gujarat, India.

Note:

- i. Please address all queries and correspondence to the Joint Managing Director, Gujarat Green Revolution Company Ltd. (GGRC), Fertilizernagar Township, PO: Fertilizernagar, Dist: Vadodara- 391750, Gujarat, India.
- ii. If the Office of the GGRC happens to be closed on the day of receipt of the Eois as specified, the Eois will be received on the next working day on opening of the Office up to the same time and at the same venue.
- iii. Please quote reference number in all your correspondence.

General Instructions

Interested Agencies who wish to participate in this Eoi will have to submit Eoi in prescribed format hereunder.

Eoi applicants are advised check the eligible criteria before submitting the EOI as mentioned in the point number 13.0 of this document

- i. **Eoi along with Quotation:** Interested Agencies shall submit physically their filled-in Eoi in sealed envelope super-scribed as "Project Name: EOI for Surveying, Designing, Supplying, Installation and Commissioning of SPV Water Pump system for irrigation in farmers' field".
The Eoi along with quotation should be submitted in triplicate (One original and Two copies). Original printed document shall be considered as authentic.
- ii. Goods/Services offered should be strictly as per specifications mentioned in this Eoi Document.

- iii. Interested Agencies shall quote the prices of Goods/services as mentioned which would be valid for at least for 1 year from the opening of the Eol document.
- iv. Once quoted, the Interested Agencies shall not make any subsequent price changes, whether resulting or arising out of any technical/commercial clarifications sought regarding the Eol, even if any deviation or exclusion may be specifically stated in the Eol document. Such price changes shall render the Eol liable for rejection.
- v. The duly filled in Eol should be sent by Registered Post / Speed Post/ Hand Delivery only so as to reach the office of GGRC, Vadodara on or before the specified date and time as advertised in the newspaper. GGRC shall not be responsible for non-receipt of the Eol for any postal delay.

Yours faithfully,

Joint Managing Director
Gujarat Green Revolution Company Ltd.
Vadodara

EXPRESSION OF INTEREST DOCUMENT FOR SURVEYING, DESIGNING, SUPPLYING, INSTALLATION AND COMMISSIONING OF SPV WATER PUMP SYSTEM FOR IRRIGATION IN FARMERS' FIELD IN THE STATE OF GUJARAT

1. Introduction

1.1 **GUJARAT GREEN REVOLUTION COMPANY LIMITED, GGRC** is come into being in 2005 by change of name from the previous "Gujarat Agri processing Co. Ltd." which has been promoted by GSFC, GNFC and GAIC and is aimed to promote Micro Irrigation System (MIS) for adoption by the farmers of Gujarat. **GGRC** works as an Implementing Agency on behalf of Government of Gujarat (GOG) and Government of India (GOI) to bring second Green Revolution in consonance with the Agriculture Policy and Vision of Government of Gujarat so as to save water and energy, besides multiple benefits to improve agricultural productivity and farmer's prosperity at large. To add the value to the success of Micro Irrigation Scheme AND Protected Cultivation (PCS) Scheme, Government of India has entrusted GGRC to implement "Installation of 1400 numbers of SPV water Pumps for irrigation under "Solar Water Pumping Programme for Irrigation and Drinking Water" in the state of Gujarat during 2014-15" vide Letter No. 32/9/2015-16/PVSE (Part-2) dated 29 September 2015 issued by the Ministry of New and Renewable Energy (Govt. Of India), New Delhi

The SPV Water Pumping Programme for irrigation will be integrated with Micro irrigation Scheme implemented by GGRC in the state. Under the Scheme, AC/DC type submersible/surface pump of 3 HP/ 5 HP capacity of SPV Water Pump system will be provided to beneficiary farmer. The beneficiary farmers will be entitled to avail Central Financial Assistance (Government of India Contribution) of Rupees 40,500/- per HP for DC Pumps and Rupees 32,400/- per HP for AC pumps for Project cost of erection and commissioning of SPV water Pump System for irrigation at his field. To avail the benefit of installation of SPV water Pump for irrigation under the scheme, beneficiary farmer normally should have Drip Irrigation System under the MIS scheme implemented by GGRC in the state of Gujarat.

Solar Photovoltaic Pump System Suppliers (SPV Water Pump Supplier) shall Survey, Design, Supply, Install and Commission the Solar Photovoltaic Water (SPV) Pump System for irrigation on farmers field.

1.2 Objectives:

- i. To Create Awareness and Demonstrate Effective Use Of Solar Water Pump With Drip Irrigation System For Farmer.
- ii. To provide clean, green and assured source of energy to farmer for irrigation where grid connection is not economical and affordable to farmer.
- iii. To replace Diesel/Grid electric operated water pump set by SPV water pump to reduce carbon footprint in environment
- iv. To promote as a means of Climate-Smart Agriculture (FAO-2010) to increase productivity in an environmentally and socially sustainable way and strengthen farmers' resilience to climate change.
- v. To improve water use efficiency & crop productivity per unit of water, increase farmers' income and consequent improvement of their life standard.
- vi. To improve energy use efficiency in agriculture sector.
- vii. Culminating to empowerment of the farming community.

2. Checklist of Documents comprising the Eol

The Eol submitted shall have the following documents:

Your submission should be signed in Original with two photocopies.

- i. In case interested SPV Water Pump Suppliers is a company- copy of Certificate of incorporation or In case of Firm- copy of the Registration Deed. These documents should be self attested by competent authority and carry the seal of the authorized signatory.
- ii. List of present Partners/Directors/owners/executive council members/ trustees/ Board members as applicable with permanent as well as present address, phone numbers and fax number.
- iii. Self attested valid Test Certificate for the offered Model of Solar Water Pumping System from a MNRE authorized testing centre. (Test Certificate should have been issued on or after 1 January 2014.)
- iv. Self Attested valid Registration certificate issued by MNRE, New Delhi for MNRE channel partner for OFF - GRID PV systems and/or MNRE empanelled partner for Solar Pumps under NABARD scheme (MNRE channel partners for any other programme are not eligible).
- v. Self attested copies of Sales Tax Registration Certificate, Service Tax, and Registration Certificate and PAN number.
- vi. Audited Balance sheet and Income statement duly signed by the statutory auditors and authorized signatory/ies of the SPV water Pump Supplier for the years 2012-13, 2013-14 & 2014-15.
 - a. Audited report of turnover of solar water pumping business should be mentioned separately if not mentioned separately in balance sheet.
- vii. Profile of the Solar Water Pump System Supplier as per **Annexure – I**
- viii. Details of the Manufacturing facilities as per **Annexure –II**
- ix. Company's experience in Surveying, Designing, Supplying, Installation and Commissioning of SPV Water Pump System in farmers' field in Gujarat or in any State of India as per **Annexure -III**
- x. Acceptance on the technical specification of the SPV water Pumping System as per **Annexure – IV**
- xi. Offer of rates as per **Annexure V**– to be submitted in hardcopy duly signed by competent authority with seal. No deviations and/or non-compliance clauses shall be allowed in the offer of rates as mentioned in the EOI.
- xii. Acceptance on the other condition of the SPV water Pumping System EOI as per **Annexure – VI**

3. Eol DOCUMENT

The Eol shall be submitted for the complete scope of work as envisaged in this Eol document. The Eol for partial scope of work or with additional conditions/deviation/additions/alterations/omissions shall be out-rightly rejected without assigning any reason thereof.

4. AMENDMENT OF Eol DOCUMENTS

At any time prior to the deadline for submission of Eol, GGRC, Vadodara for any reason, whether at its own initiative or in response to the clarifications requested by prospective Interested Agencies, may modify the Eol document by amendment. All prospective agencies who have received the Eol document will be notified of the amendment and such modification will be binding on them. In order to allow

prospective Agencies a reasonable time to take the amendment into account in preparing their Eol document, GGRC, Vadodara, at its discretion, may extend the deadline for the submission of Eol.

5. Eol FEES

A complete set of Expression of Interest as download from the Company web site www.ggrc.co.in. should be submitted along with Non refundable Eol fee of Rs. 10,000/- (Rupees Ten Thousand Only). Eol submitted without requisite fees will be summarily rejected. The mode of payment of Eol fee will be only in the form of Demand Draft from any nationalized bank payable at Vadodara in favour of "Gujarat Green Revolution Company Ltd."

6. COST OF Eol

The interested agencies shall bear all costs associated with the preparation and submission of the Eol and GGRC, Vadodara will in no case be responsible for those costs, regardless of the conduct or outcome of the Eol process.

7. FRAUDULENT AND CORRUPT PRACTICE

- i. Fraudulent practice means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract and includes collusive practice among interested agencies (prior to or after submission of Eol) designed to establish Eol prices at artificial on-competitive levels and to deprive the GGRC, Vadodara of the benefits of free and open competition.
- ii. GGRC reserves right to reject Eol if it determines that the SPV Water Pump Supplier recommended for selection has engaged in corrupt or fraudulent practices in executing the work assigned.

8. OFFER OF RATES

8.1 The Offer of Rates should be submitted in the format/price schedule given at **Annexure – V**. Interested SPV Water Pump Supplier shall categorically confirm strict compliance to the following with respect to their offer.

- i. Any effort by an Interested SPV Water Pump Supplier or Interested SPV Water Pump Supplier's agent/consultant or representative howsoever described to influence the GGRC, Vadodara in any way concerning scrutiny/consideration/ evaluation/ comparison of the Eol or decision concerning as registered supplier shall entail rejection of the Eol.
- ii. The Interested SPV Water Pump Supplier should indicate a single consolidated rate for the specified goods and services based on the payment terms specified in the Eol.
- iii. Eols should be submitted directly by the Interested SPV Water Pump Supplier.

8.2 GGRC, Vadodara reserves the right to seek clarification/justification from the Interested SPV Water Pump Supplier on the Eol price in case GGRC, Vadodara deems it necessary.

Based on the justification provided by the Interested SPV Water Pump Supplier, if GGRC, Vadodara feels that the price is unrealistic/ infeasible, GGRC Vadodara reserves the right to reject the said EoI. The Interested Agencies shall be governed by the decision of GGRC, Vadodara.

9. FORMAT AND SIGNING OF EoI

- i. The original and two copies of the EoI shall be typed or written in indelible ink and shall be signed by the Interested SPV Water Pump Supplier or a person duly authorized to bind the Interested SPV Water Pump Supplier to the Contract/Concession Agreement. All pages of the EoI, except for un-amended printed literature, shall be initialed by the person or persons signing the EoI document.
- ii. The complete EoI shall be without alteration or erasures, except those to accord with instruction issued by the GGRC or as necessary to correct errors made by the interested SPV Water Pump Supplier, in which case such corrections shall be initiated by the person or persons signing the EoI.

10. SEALING AND MARKING OF EoI DOCUMENT

- i. Interested SPV Water Pump Supplier shall submit their EoI document in Single part in sealed envelopes super-scribed as "Project Name: EoI for Surveying, Designing, Supplying, Installation and Commissioning of SPV Water Pump system for irrigation in farmers' field".
- ii. Original and 2 copies of EoI complete as per technical specification specified in Annexure-IV for AC/DC type submersible/surface pump of 3 HP/ 5 HP capacity of SPV water pump system.
- iii. The envelopes containing EoI should be enclosed in a larger envelope duly sealed. All pages of the offer must be signed.
- iv. The outer envelope shall indicate the name and address of the interested SPV Water Pump Supplier to enable the EoI to be returned unopened in cases it is declared 'late'.
- v. If the outer envelope is not sealed and marked as required, the GGRC will assume no responsibility for the EoI's misplacement or premature opening.

11. EoI DUE DATE

- i. EoI must be received by the GGRC at the address specified in the EoI Document not later than the date specified in the advertisement of newspaper.
- ii. The GGRC may, at its discretion, on giving reasonable notice by fax or any other written communication to all prospective parties who have been issued the EoI documents, extend the EoI due date, in which case all rights and obligations of the GGRC and the interested agencies, previously subject to the EoI due date, shall thereafter be subject to the new EoI due date as extended.
- iii. Any EoI received by the GGRC after the EoI due date/time prescribed in the EoI Document shall be rejected.

- iv. Any EoI indicating conditions beyond those indicated in this EoI Document i.e. conditional EoI shall be rejected.

12. EoI EVALUATION

The evaluation will be carried out by GGRC based on criteria set out here under in EoI.

13. ELIGIBLE CRITERIA FOR SELECTION OR SHORT LISTING FOR REGISTRATION OF SPV WATER PUMP SYSTEM SUPPLIERS

- (i)* The party is eligible to apply for registration as SPV water Pump System Supplier if they fulfil any one of the following criteria:

A Registered Company with manufacturing facility in India for SPV Cells / Modules OR Motor-pump Sets OR Solar Pumps Inverter (Tested & Certified by MNRE accredited lab) (as per certificate from DIC). and Company must be either a MNRE channel partner for OFF - GRID PV systems and/or MNRE empanelled partner for Solar Pumps under NABARD scheme (MNRE channel partners for any other programme are not eligible).

OR

A PV System Integrator who must be either a MNRE channel partner for OFF - GRID PV systems and/or MNRE empanelled partner for Solar Pumps under NABARD scheme (MNRE channel partners for any other programme are not eligible).

- (ii) Company's/ PV System Integrator must have experience in surveying, designing, supplying installation , commissioning and maintenance of SPV water Pump system on farmers' field in Gujarat or in any State of India along with the satisfactory completion certificate from the implementing agency. (Should be proved by documentary evidence)

At least 20 numbers of the Solar Photovoltaic Water Pumping Systems should have been installed & commissioned (should be proved by documentary evidence) by the party during the last three years from the date of submission of EOI.

- (iii) Financial strength of the organization; the party must have turnover of minimum Rs. 3 crore in business (should be proved by documentary evidence) of SPV water pump system (i.e. in installation and commissioning) during any one year of the three year period from 2012-13 to 2014-15, GGRC may at its discretion reduce the minimum turn over limit.
- (iv) EOI Applicant should have Test Certificate for the offered Model of Solar Water Pumping System from a MNRE authorized testing centre. (Test Certificate should have been issued on or after 1 January 2014).

- (v) The EOI applicant should have valid CST / State VAT/ TIN registration certificate in that state. A copy of which should be enclosed.
- (vi) The Company/ PV System Integrator must have well qualified staff i.e. Technician / Engineers/Agronomist with suitable year of experience.
- (viii) GGRC at its own sole discretion may appoint a third party inspection agency to assess manufacturing capability and quality assurance system of company's/ PV system integrator's manufacturing site. GGRC or its competent authorized officer may visit manufacturing site and registered office for verification of credentials of company/ PV system integrator.
- (ix) This programme will be implemented on the line of Micro irrigation Scheme implementation module adopted by GGRC in Gujarat state. It is advised to all Eol applicants to study separately the implementation module of GGRC before applying for registration of the SPV water Pump System Supplier.

Criteria no. (i)* is essential for selection as registered SPV Water Pump system supplier under the programme. SPV water Pump system supplier while submitting their EOI should ensure that they are meeting the criteria.

14. REGISTRATION FEE:

- i. Non refundable fee of Rs. 3,00,000 (Rupees Three lakhs only) shall be required to be paid for registration as one of the registered SPV Water Pump System Suppliers with GGRC subject to acceptance and assessment of EOI and your selection as registered SPV water pump supplier.
- ii. The amount of Rs. 3,00,000/- (Rupees Three lakhs only) shall be paid to GGRC by DD/multi city cheque in favour of Gujarat Green Revolution Company Ltd. Payable at Vadodara (Baroda) after selection as registered SPV Water Pump System Suppliers of GGRC.

15. RENEWAL REGISTRATION FEES:

Once SPV Water Pump System Suppliers are registered in GGRC, for every next financial year, a renewal fees would be charged by GGRC from them. Non-payment of such fees would lead to cancellation of SPV Water Pump System Suppliers registration. The amount of renewal registration fees will be decided by GGRC from time to time and which will be binding to the SPV Water Pump System Suppliers.

16. THE GGRC'S RIGHTS TO ACCEPT ANY EOI AND TO REJECT ANY OR ALL Eols

The GGRC reserves the right to reject any Eol and to annul the Eol process and reject all Eols at any time prior to award of Contract without thereby incurring any liability to the affected Agency(ies) or any obligation to inform the affected Agency(ies) of the grounds for such decision.

17. PAYMENT TERMS

The terms of payment under the Scheme:

i. **Advance Payment:**

25% advance payment of total SPV water pump system cost will be released to SPV Water Pump System Suppliers after receipt of Tri Party Agreement (to be executed between farmer-Supplier and GGRC) along with Farmer's Share in case of non-loanee farmers.

In case of loanee farmers, GGRC will advice bank to release 50% advance payment of total SPV Water Pump System cost after receipt of Tri Party Agreement.

ii. **Balance/Final Payment:** In case of non-loanee farmers, remaining 70% payment of total SPV Water Pump System cost will be given after the submission of completion of the installation work and satisfactory trial run report in prescribed format by GGRC appointed third party agencies or any authorized officer from GGRC and remaining 5 % will be kept as security deposit for five years.

In case of loanee farmers, an advice will be sent to bank to credit remaining 45% payment of total SPV Water Pump System cost farmer's loan account and for onward release in favor of SPV water Pump supplier after the submission of completion of the installation work and satisfactory trial run report in prescribed format by GGRC appointed third party agencies or any authorized officer from GGRC and remaining 5 % will be kept as security deposit for five years.

However it is to be noted that the release of final payment will depend upon the receipt of financial grant from MNRE ,Gol ,New Delhi from time to time.

18. SECURITY DEPOSIT

The Security Deposit will be 5% of the total SPV water Pumping System cost. The security deposit will be held for period of 5 years. But the SPV water Pump System supplier may claim his security deposit after completion of 3 years from the date of handover of SPV Water Pump System to farmer by providing the bank guarantee of same amount for remaining 2 years and GGRC will refund the amount after deduction of penalty and other dues, if any. The security deposit will be interest free.

19. PENALTY

In case the SPV Water Pump Supplier fails to complete the work as per the time limit given in the work order, the GGRC will levy a maximum penalty @ 1% (one per cent) of the total SPV Water Pump System cost for each week of delay for a maximum of 30 days after which, the GGRC may ask any other registered SPV Water Pump Supplier to complete the work at the risk and cost of the original SPV Water Pump Supplier and the same will be recovered from them.

Thereafter, the amount for which SPV water pump supplier has defaulted will be recovered from security deposit or any due payment to be made to the defaulter SPV Water Pump Supplier. The defaulter SPV Water Pump Supplier will cease to have any right to carry out the work under the SPV water pumping system programme.

20. SCOPE OF WORK

Surveying, Designing, Supplying, Installation, Commissioning and Maintenance of 3/ 5 HP capacity of AC/DC type submersible/surface SPV water Pump system integrated with drip irrigation system in the farmer's field.

Selected SPV Water Pump Supplier will supply and install the AC/DC type submersible/surface pump of 3 HP/ 5 HP capacity of SPV Water Pump system as chosen and required by farmer within technical specifications (**Annexure- IV**) and in stipulated time period.

21. INSURANCE OF THE SPV WATER PUMP SYSTEM AND LIFE OF BENEFICIARY FARMERS:

Insurance to be provided for the SPV Water Pump system as well as the life of the beneficiary farmers for the period of one year from the date of the handing over the SPV Water Pump system to the beneficiary farmers. Insurance will form a part of total SPV Water pump system cost. The charges of Insurance premium will be decided by GGRC for which the interested agency need not required to quote in the EoI.

22. SPECIFIC TERMS AND CONDITIONS WITH RESPECT TO WARRANTY / MAINTENANCE/TRAINING TO BENEFICIARY FARMER.

i. Warranty:

The Warranty period for the components / equipment supplied is as per MNRE guidelines issued from time to time and for this EoI which shall be **Five years** from the date of installation and handover to the farmer. Any equipment / component is found to have manufacture defect or poor workmanship within the warranty period, the SPV Water Pump system supplier shall replace the same with free of cost within five days of intimation from the beneficiary farmer.

In the event of any instrument / component getting broken or damaged during installation and trial run at the site before handing over the SPV Water Pump system to the farmer / applicant, SPV Water Pump system supplier shall replace the same free of cost.

ii. Maintenance and Repairing Services:

SPV Water Pump system Supplier shall provide maintenance and repairing services free of cost for a period of 5 year from the date of handling over the SPV Water Pump system.

Except manufacturing defect, in case of any repair / replacement of fitting / spare parts during the period of 5 year from the date of handing over to the farmer, the SPV Water Pump system supplier will supply the same and recover the cost from the farmer/applicant as per the rates decided from GGRC. However, SPV Water Pump system Supplier must provide repairing services free of cost and ensure availability of fittings and spare parts of the total system within five days of getting the request from the farmers. This is to ensure optimal crop performance and system sustainability.

iii. Training to the farmer / applicant

It is obligatory on the part of SPV Water Pump system Supplier to provide operational and maintenance training to run SPV Water Pump system smoothly and trouble free.

23. OTHER OBLIGATIONS

The registered SPV Water Pump system Supplier shall provide all assistance to the GGRC representative/s and to the authorized officers as they may reasonably require to perform their duties and services in implementation of this programme viz.,

- i. The SPV Water Pump system Supplier shall provide progress reports on a weekly basis to GGRC or as and when demanded.
- ii. The SPV Water Pump system Supplier will allow GGRC or their authorized representative to enter the premises to monitor the progress of work.
- iii. The SPV Water Pump system Supplier shall be responsible for all statutory obligations/ liabilities like Salary, ESI, PF, etc. as per Labour Laws for the manpower employed by them for the project.
- iv. The SPV Water Pump system Supplier shall be responsible for any damage done during the demolition and indemnify the GGRC against any claims on account thereof including third party and workmen's compensation claims. If damages are done to the said property or any adjoining property, GGRC shall be entitled to have the same put right at the risk and expense of the interested SPV Water Pump Supplier or treat the default as a ground for termination of the registration.
- v. The SPV Water Pump system Supplier shall acquire no interest in the land comprised in the said property except to enter therein for the purpose indicated in assigned work, and in particular shall not be entitled to reside or allow anyone to reside or remain on the property except a Chowkidar to protect the supplied material.
- vi. The SPV Water Pump system Supplier will observe all local laws applicable while executing the scope of work.
- vii. The SPV Water Pump system Supplier will hand over the premises to the Farmer on completion of their work.

24. GGRC'S OBLIGATION

Grant in a timely manner all such approvals, permissions and authorizations which the SPV Water Pump Supplier may require or is obliged to seek from GGRC in connection with the performance of the their obligations.

25. TERMINATION OF THE REGISTRATION

The GGRC will have the right to cancel the registration if the SPV Water Pump Supplier commits breach of any or all conditions of the registration. Breach of condition of registration includes, but not limited to, the following:

- i. It is found that the schedule of implementation of the work is not being adhered to.
- ii. The SPV Water Pump Supplier stops work and such stoppage has not been authorized by GGRC.
- iii. The failure of SPV Water Pump Supplier to attend the complaint in correcting the defects/irregularity for smooth operation of SPV water Pump within a reasonable period as given in the notice by the GGRC.

If the registration is terminated by the GGRC unilaterally, GGRC will settle all claims through a mutually agreeable settlement.

26. SUSPENSION

The GGRC may, by a written notice may keep SPV Water Pump Supplier under suspension if the SPV Water Pump Supplier fails to perform any of its obligations under the given scope of work (including the carrying out of the services) provided that such notice of suspension:

- i. Shall specify the nature of the failure and
- ii. Shall request the SPV Water Pump Supplier to make good such failure within a specified period from the date of receipt of such notice of suspension by the SPV Water Pump Supplier.

27. TRANSFER OF RIGHTS

The SPV Water Pump Supplier shall not transfer or sublet the scope of work to anybody.

28. JURISDICTION OF COURT

The Courts of Vadodara shall have Jurisdiction in all the matters arising under this EoI.

29. FORCE MAJORE

“If, at any time during the continuance of this contract, the performance in whole or any part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, act of the public enemy, civil commotion, sabotage, fires, floods, explosion, epidemics. Quarantine restrictions, strikes, lock-outs or acts of god (hereunder referred to as event)” then provided notice of the happening of any such event is given by either party to the other within seven days from the date of occurrence thereof neither party shall be reason of such event be entitled to terminate this contract nor shall either party shall have any claim for damages against the other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event has come to end or ceased of exist, and the decision of the Joint Managing Director, GGRC as to whether the deliveries have been so resumed or not shall be final and conclusive.

30. ARBITRATION

All questions, disputes or differences whatsoever, which may, at any time, arises between the parties i.e. the selected SPV Water Pump Supplier, Farmers of group and GGRC, upon or in relation to or in connection with the contract shall be referred to the Joint Managing Director, GGRC for that purpose and the decision of the Joint Managing Director, GGRC shall be final and binding upon both the parties.

31. WORKMEN’S COMPENSATION FUND AND EMPLOYER’S LIABILITY INSURANCE

The SPV Water Pump Supplier shall cover all his employees under workmen’s compensation fund and under the liability insurance. The GGRC shall not be responsible for any payments of compensation to the workers/supervisor of the SPV Water Pump Supplier for fatal or non-fatal accidents during the currency of the contract.

32. WORK SCHEDULE

The total period for Surveying, Designing, Procurement, Supply, Installation, Testing and Commissioning of SPV Water Pump system is as per the scope of work defined by GGRC time to time.

33. MATERIAL VERIFICATION AND TRIAL-RUN

The material verification and trial run of installed SPV Water Pump system will be carried out by GGRC appointed third part inspection agencies or authorised officer from GGRC.

Profile of the SPV Water Pump Supplier

1.0 The SPV Water Pump System Supplier/PV System Integrator should furnish the following details:

Sr. No.	Particulars	Details
1	a. Name of the Organization	
	b. Registered Name as per Company Act	
	c. Registered Brand Name of SPV Water Pump System	
2	Type of the Organization (Govt./ Public/ Private/ Partnership/Proprietorship/ Trust/ Society)	
3	List of Present Partners / Directors / owners / Executive council members / trustees / Board members (attach separate sheet showing the details)	
3	Address with phone no and fax	Registered Office
		Corporate office
4	Name of the Applicant Person and Designation	

5	Any other details in support of your offer (if required)	
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2.0 Organizational set up of professional experts/specialists at the head quarter:

Particulars	Technician	Engineers	Agronomist	Remarks
i. No. of persons engaged				
ii. Experience (range in years)				

Attach manpower wise separate sheet (includes Name, qualification, experience) as mentioned in the above table.

Seal of Organization

Signature

Date:

(For and on behalf of Name and Designation with Seal)

Details of Manufacturing Facilities

I. PV Array Manufacturing Facility

Sr. No.	Address of the Mfg. Location	Type of PV Array	Capacity (unit/year)

II. Electronic Inverter/Controller Components

Sr. No.	Address of the Mfg. Location	Capacity (Unit/yr)
1		
2		
3		

III. Motor Pump

Sr. No.	Address of the Mfg. Location	Type of Pump (AC/DC) Surface or Submersible	Capacity (Unit/yr)
1			
2			
3			

Attach copy of applicable IEC standard conformity test report from approved testing centre of MNRE, New Delhi for SPV water pumping system components manufactured by your company / firm.

Seal of Organization

Signature

Date:

(For and on behalf of Name and Designation with Seal)

Company's/ PV System Integrators Experience In Surveying, Designing, Supplying, Installation and Commissioning of SPV Water Pump System In Farmers' Field In Gujarat or In any State of India

1. List of total SPV Water pump System commissioned

Year of commissioning	State	Implementing Agency*	No. of units commissioned				Total No. of unit commissioned
			AC		DC		
			3 HP	5 HP	3 HP	5HP	

* Please mention the name and contact details of Implementing Agency

2. List of farmers (minimum 20 in numbers) where SPV Water pump System are commissioned by you which can illustrate best of your ability as SPV Water pump System Supplier

Sr. No.	Name of the farmer	Mobile No.	Village	Taluka	District	State	Type of Pump and capacity	Installation year
1								
2								
3								
..								
20								

Above furnished is true and correct to best of my knowledge.

Seal of Organization

Signature

Date:

(For and on behalf of Name and Designation with Seal)

Technical Specifications of SPV Water Pumping System

- I. Solar photovoltaic (SPV) water pumping system consisting of:
- i) PV Array

Capacity in the range of 200 Wp to 10 KWp. **These ranges of Solar Photovoltaic (SPV) Water Pumping System are basically for Irrigation applications. However, these may also be used for “Drinking Water Application wherever such capacities are required**

PV Array Should be mounted on a suitable structure with a provision of tracking the sun.

- ii) Motor Pump set (Surface or Submersible):
 - D.C. Motor Pump Set (With Brushes or Brush less D.C.)
 - OR
 - A.C. Induction Motor Pump set with a suitable inverter.
- iii) Electronics:
 - a. Maximum Power Point Tracker (MPPT)
 - b. Inverter for A.C. Motors (Appropriate Electronic Controller in Case of B.L.D.C)
 - c. Electronic Protections
- iv) Interconnect Cables, and
- v) “On-Off” switch,

II. PERFORMANCE SPECIFICATIONS AND REQUIREMENTS

Solar PV Water Pumps with PV array minimum capacity in the range of 900 Wp to 5 KWp to be installed on a suitable bore well/open well/water reservoir/water stream etc. at location specified by farmer in the state of Gujarat.

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:

“Total Dynamic Heads” should be as specified below:

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

- i) 100 liters of water per watt peak of PV array, from a Total Dynamic Head of 10 metres (Suction head, if applicable, minimum of 7 metres) and with the shut off head being at least 12 metres.
- ii) 50 liters of water per watt peak of PV array, from a Total Dynamic Head of 20 metres (Suction head, if applicable, up to a maximum of 7 metres) and with the shut off head being at least 25 metres.
- iii) 35 liters of water per watt peak of PV array, from a Total Dynamic Head of 30 metres and the shut off head being at least 45 metres.

- iv) 21 liters of water per watt peak of PV array, from a Total Dynamic Head of 50 metres and the shut off head being at least 70 metres.
- v) 14 liters of water per watt peak of PV array, from a Total Dynamic Head of 70 metres and the shut off head being at least 100 metres.
- vi) 9.5 liters of water per watt peak of PV array, from a Total Dynamic Head of 100 metres and the shut off head being at least 150 metres.**

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.

Indicative performance specifications for the Shallow and Deep well SPV Water Pumping Systems are given in the Annexure IV-A and Annexure IV-B respectively.

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

- i) 90 liters of water per watt peak of PV array, from a Total Dynamic Head of 10 metres (Suction head, if applicable, minimum of 7 metres) and with the shut off head being at least 12 metres.
- ii) 45 liters of water per watt peak of PV array, from a Total Dynamic Head of 20 metres (Suction head, if applicable, up to a maximum of 7 metres) and with the shut off head being at least 25 metres.
- iii) 32 liters of water per watt peak of PV array, from a Total Dynamic Head of 30 metres and the shut off head being at least 45 metres.
- iv) 19 liters of water per watt peak of PV array, from a Total Dynamic Head of 50 metres and the shut off head being at least 70 metres.
- v) 13 liters of water per watt peak of PV array, from a Total Dynamic Head of 70 metres and the shut off head being at least 100 metres.
- vi) 8.5 liters of water per watt peak of PV array, from a Total Dynamic Head of 100 metres and the shut off head being at least 150 metres.**

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.

Indicative performance specifications for the Shallow and Deep well SPV Water Pumping Systems are given in the Annexure IV-C and Annexure IV-D respectively.

III. PV ARRAY

The SPV water pumping system should be operated with a PV array capacity in the range of 200 Watts peak to 10000 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 125 Watts peak, with adequate provision for measurement tolerances. Use of PV modules with higher power output is preferred.

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.

- i) Modules supplied with the SPV water pumping systems should have certificate as per IEC 61215 specifications or equivalent National or International/ Standards.
- ii) Modules must qualify to IEC 61730 Part I and II for safety qualification testing.

- iii) The efficiency of the PV modules should be minimum 14% and fill factor should be more than 70%.
- iv) The terminal box on the module should have a provision for “Opening” for replacing the cable, if required.
- v) There should be a Name Plate fixed inside the module which will give:
 - a. Name of the Manufacturer or Distinctive Logo.
 - b. Model Number
 - c. Serial Number
 - d. Year of manufacture

IV. MOTOR PUMP SET

- i) The SPV water pumping systems may use any of the following types of motor pump sets:
 - a. Surface mounted motor pump-set.
 - b. Submersible motor pump set.
 - c. Floating Motor Pump Set
 - d. Any other type of Motor pump set after approval from test centre of the Ministry of New and Renewable Energy, New Delhi
- ii) The “Motor Pump Set” should have a capacity of 3 hp and 5 hp and should have the following features:
 - a. The mono block DC/ AC centrifugal motor pump set with the impeller mounted directly on the motor shaft and with appropriate mechanical seals which ensures zero leakage.
 - b. The motor of the capacity 3 hp and 5 hp should be AC, PMDC or BLDC type. The suction and delivery head will depend on the site specific condition of the field.
 - c. Submersible pumps could also be used according to the dynamic head of the site at which the pump is to be used.
- iii) It is recommended that all parts of the pump and the motor of the submersible pumps should be made of stainless steel.
 - a. The manufacturers of pumps should self certify that, the pump and **all external parts of motor used in submersible pump which are in contact with water, are of stainless steel.** The pumps used for solar application should have a 5 years warranty so it is essential that the construction of the pump be made using parts which have a much higher durability and do not need replacement or corrode for at least 5 years.
- iv) ***Provision for remote monitoring of the installed pumps must be made in the controllers or the inverters either through an integral arrangement or through an externally fitted arrangement. It should be possible to ascertain the daily water output, the power generated by the PV array, the UP TIME of the pump during the year, Number of days the pump was unused or under breakdown/repairs.***

SPV Water Pumping Systems shall have online Remote Monitoring Mechanism (RMM) and the SPV water pump supplier would make provision for monitoring the performance of SPV Water pump till the warranty period.

The channels for remote communication and other communication devices/equipment associated with RMM shall be provided by the SPV water Pump Supplier

The RMM should have following features:-

- a. Web portal to view on line data such as voltage, current, power, energy generated and pump on / off duration.
- b. Provision for Generation of various reports in the printable format
- c. Data shall be extracted locally and uploaded to the server in the event of loss of communication.
- d. Provision for Data export in standard format
- e. Historical data made available in server for report generation
- f. The sample log-book deployed for output data and performance of the SPV water pump:-

From DD/MM/YY to DD/MM/YY

S.no	Parameter Name	Unit	Result	Date (DD/MM/YY)
1	Maximum Voltage (Vmax)	Volt		
2	Maximum Current (I Max)	Amp		
3	Power Generated by PV Array(Pmax)	Watt		
4	Total Water Putput	Ltr		
5	Pump on/Off	On/Off/Error		

Note: - It is expected that the software shall be able to show the results of above listed parameters at a glance / individual as desired for a day / particular period.

- v) 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.
- vi) The suction/ delivery pipe (GI/HDPE), electric cables, floating assembly, civil work and other fittings required to install the Motor Pump set.

V. MOUNTING STRUCTURES and TRACKING SYSTEM.

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.

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.

VI. ELECTRONICS AND PROTECTIONS

- i) Maximum Power Point Tracker (MPPT) should be included to optimally use the Solar panel and maximize the water discharge.
- ii) Inverter could be used, if required, to operate an A.C. Pump. The inverter must have **IP 54** protection or must be housed in a cabinet having at least **IP 54** protection or must be housed in a cabinet having at least **IP 54** protection.

- iii) Controller for BLDC motor driven pumps, if required be used. The controller must have **IP 54** protection or must be housed in a cabinet having at least IP 54 protection.
- iv) Adequate protections should be incorporated against dry operation of motor pump set, lightning, hails and storms.
- v) Full protection against open circuit, accidental short circuit and reverse polarity should be provided.

a) **Earthing and Lightning Protection:**

Earthing: The array structure of the PV shall be grounded properly using adequate number of earthing kits. All metal casing or shielding of the pumping system shall be thoroughly grounded to ensure safety of the solar pumping systems.

Lighting Arrester: The SPV water pumping system should be provided with lightning and overvoltage protection. The principle aim in this protection is to reduce the over voltage to a tolerable value before it reaches the PV or other sub systems components. The source of over voltage can be lightning or another atmospheric disturbance. Necessary foundation for holding the Lightning Arrestors (LA) is to be arranged keeping in view the wind speed of the site and flexibility in maintenance in future. Suitable number of lightning arrestors will be provided in the array field.

Lighting & Over Voltage Technical Specifications	
Parameters	Specification
Diameter of pipe	1 ½ " diameter
GI Spike	5 feet long
Earth Pit	Maintenance free earthing
Color	Red/Blue/Black
Protection	Power Surges/ Lightning Strikes

VII. ON/OFF SWITCH

A good reliable switch suitable for DC use is to be provided. Sufficient length of cable should be provided for inter-connection of the PV array, Controller / Inverter and the motor pump set. Preferably the Inver/Controller should have a arrangement to switchover from solar to Grid connection and vice versa for easy operation.

VII. LCD Display showing following parameters

- a) Frequency of VFD,
- b) Voltage,
- c) Current,
- d) Output Watt and
- e) Cumulative in KWH.

VIII. WARRANTY

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. The whole system including submersible/ surface pumps shall be warranted for 5 years. Required Spares for trouble free operation during the Warrantee period should be provided along with the system.

IX. OPERATION AND MAINTENANCE MANUAL

An Operation and Maintenance Manual, in English and/or Vernacular language, should be provided with the solar PV pumping system. The Manual should have information about solar energy, photovoltaic, modules, AC motor pump set, mounting structures, electronics and switches. 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. Name and address of the person or Centre to be contacted in case of failure or complaint should also be provided. A warranty card for the modules and the motor pump set should also be provided to the beneficiary.

X. NOTES

- i) Wherever the "Water table" or the level of water in the reservoir or the water source (e.g. Diggie) from which the water is to be pumped, is within 10 meters depth, 'Surface Motor Pump sets" should be preferred.
- ii) 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 section II above.
- iii) There should not be any compulsion to use only one or the other type of Motor-pump set. The beneficiary may select an appropriate Model (i. e. Capacity of PV Array and Type of Motor Pump Set) as per site requirement.

XI. NAME PLATE:

Name Plate in Gujarati Language of size 2ft by 2 ft on iron plate is required to be prepared as per following details and required to be fixed on the system for every installation.

GGRC Prayojit "Surya Urja Sanchalit Tapak Sinchayi Paddhati "	
1	Name of beneficiary (farmer)
2	Name of Village Taluka /District
3	Solar PV capacity in Wp and DC/AC submersible Pump capacity in HP
4	Pump head
5	Name of Supplier of the system
6	Address and Contact no of Supplier 's Service centre for informing faults in the system
7	Programme Implemented by Gujarat Green Revolution Co. Ltd, Vadodara

The above technical specifications are unconditionally accepted to me and rates quoted are according to the above tech. specifications.

Seal of Organization

Signature

Date:

(For and on behalf of Name and Designation with Seal)

Indicative Technical Specifications as per MNRE guideline for Shallow Well (Surface) D.C. Solar Pumping Systems

With D.C. Motor Pump Set with Brushes or Brush Less D.C.(B.L.D.C.) Description	Model-III
PV array	2700 Wp
Motor capacity	3 hp
Shut Off Dynamic Head	25 metres
Water output *	135,000 litres per day from a total head of 20 metres

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).

Notes:

1. Suction head, if applicable, minimum 7 metres.
2. For higher or lower head / PV capacity, or in between various models; water output could be decided as per the clause II. (i.e. performance specifications and requirements) specified earlier.
3. 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.
4. Module mounting structure shall be MS hot dipped galvanised, with a facility of manual tracking at least three times a day.

**Indicative Technical Specifications as per MNRE guideline for Deep well
(submersible) D.C. Solar Pumping Systems**

With D.C. Motor Pump Set with Brushes or Brush Less D.C.(B.L.D.C.) Description	Model-III	Model-IV	Model-V	Model-VI	Model-VII	Model-VIII
PV array	3000 Wp	3000 Wp	3000 Wp	4800 Wp	4800 Wp	4800 Wp
Motor capacity	3 hp submersible with controller	3 hp submersible with controller	3 hp submersible with controller	5 hp Submersible with controller	5 hp Submersible with controller	5 hp Submersible with controller
Shut Off Dynamic Head	45 metres	75 metres	100 metres	70 metres	100 metres	150 metres
Water output*	105,000 litres per day from a total head of 30 mtres	63,000 litres per day from a total head of 50 mtres	42,000 litres per day from a total head of 70 metres	100,800 litres per day from a total head of 50 metres	67,200 litres per day from a total head of 70 metres	45,600 litres per day from a total head of 100 metres

* 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).

Notes:

1. For higher or lower head / PV capacity, or in between various models; water output could be decided as per the clause II. (i.e. performance specifications and requirements) specified earlier.
2. If surface pumps are used in lieu of submersible pumps, the water output must match that of the submersible pumps as specified in this table.
3. Module mounting structure shall be MS hot dipped galvanised, with a facility of manual tracking at least three times a day.

Indicative Technical Specifications as per MNRE guideline for Shallow Well (Surface) A.C Solar Pumping Systems,

With A.C. Induction Motor Pump Set and a suitable Inverter: Description	Model-III	Model-IV	Model- V	Model- VI
PV array	2700 Wp	2700 Wp	4800 Wp	4800 Wp
Motor capacity	3 hp	3 hp	5 hp	5 hp
Shut Off Dynamic Head	15metres	25 metres	15metres	30 metres
Water output *	243,000 litres per day from a total head of 10 metres	121,500 litres per day from a total head of 20 metres	432,000 litres per day from a total head of 10 metres	216,000 litres per day from a total head of 20 metres

* 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).

Notes:

1. Suction head, if applicable, minimum 7 metres.
2. For higher or lower head / PV capacity, or in between various models; water output could be decided as per the clause II. (i.e. performance specifications and requirements) specified earlier.
3. 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.
4. Module mounting structure shall be MS hot dipped galvanised, with a facility of manual tracking at least three times a day.

Indicative Technical Specifications as per MNRE guideline for Deep well (submersible) Solar A.C Pumping Systems:

With A.C. Induction Motor Pump Set and a suitable Inverter: Description	Model-III	Model-IV	Model-V	Model-VI	Model-VII	Model-VIII
PV array	3000 Wp	3000 Wp	3000 Wp	4800 Wp	4800 Wp	4800 Wp
Motor capacity	3 hp submersible with controller	3 hp submersible with controller	3 hp submersible with controller	5 hp Submersible with controller	5 hp Submersible with controller	5 hp Submersible with controller
Shut Off Dynamic Head	45 metres	75 metres	100 metres	70 metres	100 metres	150 metres
Water output*	96,000 litres per day from a total head of 30 metres	57,000 litres per day from a total head of 50 metres	39,000 litres per day from a total head of 70 metres	91,200 litres per day from a total head of 50 metres	62,400 litres per day from a total head of 70 metres	40,800 litres per day from a total head of 100 metres

* 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).

Notes:

1. For higher or lower head / PV capacity, or in between various models; water output could be decided as per the clause II. (i.e. performance specifications and requirements) specified earlier.
2. If surface pumps are used in lieu of submersible pumps, the water output must match that of the submersible pumps as specified in this table.
3. Module mounting structure shall be MS hot dipped galvanised, with a facility of manual tracking at least three times a day.

OFFER OF RATES FOR SPV WATER PUMP SYSTEM

To
 The Joint Managing Director
 Gujarat Green Revolution Company Ltd. (GGRC)
 Fertilizernagar Township, PO: Fertilizernagar,
 Dist: Vadodara- 391 750, Gujarat, India.

Sir,

I/We hereby express our desire to work as SPV Water Pump System Supplier for Surveying, Designing, Procurement, Supply, Installation and Commissioning of SPV water Pump System on farmer's field as per Terms and Conditions mentioned in the EoI. **The rates are quoted in the prescribed format given below:**

S. No	Type of SPV Water Pumping System*	PV Array	Type of Motor Pump Set	Motor Capacity	Offered Rates in Indian Rupees
1	Shallow Well (Surface) Solar Pumping System with D.C. Motor Pump Set with Brushes or Brush Less D.C. (BLDC)	2700 Wp	D.C.	3 HP	
2	Deep Well (Submersible) Pumping System with D.C. Motor Pump Set with Brushes or Brush Less D.C. (BLDC)	3000 Wp		3 HP submersible with controller	
3	Deep Well (Submersible) Pumping System with D.C. Motor Pump Set with Brushes or Brush Less D.C. (BLDC)	4800 Wp		5 HP submersible with controller	
4	Shallow Well (Surface) Solar Pumping System with A.C. Induction Motor Pump Set and a suitable inverter	2700 Wp	A.C.	3 HP	
5	Shallow Well (Surface) Solar Pumping System with A.C. Induction Motor Pump Set and a suitable inverter	4800Wp		5 HP	
6	Deep Well (Submersible) Pumping System with A.C. Induction Motor Pump Set and a suitable inverter	3000 Wp		3 HP submersible with controller	
7	Deep Well (Submersible) Pumping System with A.C. Induction Motor Pump Set and a suitable inverter	4800 Wp		5 HP submersible with controller	

*For detailed technical specification as per MNRE Guidelines for above water pumping system please refer Annexure IV-A, IV-B, IV-C and IV-D of this EoI Document.

The rate indicated is all-inclusive (Taxes, Duties or any other charges if applicable) and are valid and shall remain firm for the entire period of the contract from the date of submission of the EOI.

I/We hereby unconditionally accept the terms and conditions set by the GGRC during the implementation of the entire SPV water Pumping Scheme.

Seal of Organization

For & on behalf of

Date:

with Name & Designation with seal

ACCEPTANCE OF OTHER CONDITIONS

OTHER CONDITIONS:

- i. EOI applicant experience should be in supply, installation and commissioning of SPV water Pumping system on farmer field for MNRE/Govt. supported Schemes as well as self financed by farmer in India.
- ii. The above experience may be anywhere in India.
- iii. The total experience of solar pumping systems will be taken into account irrespective of the experience being in AC or DC Motor pump sets and surface or submersible Pump sets.
- iv. Consortium agreements, joint ventures and assignment of the project is not permitted to seek eligibility in this programme.
- v. The same make of Solar Panels, pumps, inverter / controller for which the test report is submitted in the EOI document should be supplied by the registered SPV water Pump supplier.
- vi. EOI applicant who are black-listed in any state would not be eligible to apply in GGRC.
- vii. Remote monitoring should not be a complex system involving flow and pressure sensors and transducers.
- viii. For any technical specification to be referred is as per MNRE guidelines issued from time to time.

The above conditions are unconditionally accepted to me and EOI is submitted according to the above conditions.

Seal of Organization

Signature

Date:

(For and on behalf of Name and Designation with Seal)