

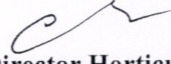
**Government of Rajasthan
Directorate of Horticulture, Rajasthan, Jaipur**

No.F () DH / Solar/EOI/2017-18/ 7957

Dated: 20.03.2017

Expression of Interest

A major project of Solar Photovoltaic (SPV) Pump sets for the farmers of Rajasthan on subsidy is to be implemented during 2017-18. The Directorate of Horticulture/ RHDS invites offers through online e-procurement from experienced and reputed solar/pump/controller manufacturers or system intergrator, who are interested in supplying, commissioning and maintaining Solar Photovoltaic (SPV) Pump sets. The interested firms may visit at <http://www.eproc.rajasthan.gov.in> for details. The EOI may be downloaded from 27.03.2017 at 11:00 am to 28.04.2017 at 11.00 am. The same is required to be submitted online till 28.04.2017 upto 5.00 pm.


Director Horticulture

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<http://www.horticulture.rajasthan.gov.in>
(Horticulture Department)

**RAJASTHAN HORTICULTURE
DEVELOPMENT SOCIETY**

**EOI Document for Empanelment
Solar Water Pumping Programme 2017-18 for Hi-tech
Horticulture /Agriculture purposes in the state of
Rajasthan**

**Directorate of Horticulture
Pant Krishi Bhawan, Jaipur, Rajasthan, India**

A. Contents of Bidding Document

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B. Cost of Bid Document:

The EOI/ Bid documents along with terms and conditions may be obtained by paying Non refundable fees Rs. 1000/- (One thousand) in favour of "Member Secretary, Rajasthan Horticulture Development Society, Jaipur" through DD payable at Jaipur. The document may be downloaded from the website <https://eproc.rajasthan.gov.in> and may be submitted with a bank draft of Rs. 1000/- in favour of MD, RISL, Jaipur. The concerned may also visit website <http://horticulture.rajasthan.gov.in> for details.

(I) Instructions to Bidders for empanelment to supply and commission Solar Photovoltaic (SPV) Pump at the farmer's fields in Rajasthan

1.	Scope of Bid	1.1	In support of Expression Of Interest (EOI) published by Rajasthan Horticulture Development Society, Jaipur for empanelment to supply and commissioning of Solar Photovoltaic (SPV) Pump at the farmers' fields in Rajasthan.
		1.2	The successful bidder/ empanelled firm will be expected to commission the SPV pump within stipulated time.
2.	Online EOI/ bid	2.1	The EOI/ bid proposals are to be submitted only online in electronic form on website https://eproc.rajasthan.gov.in .
3.	Eligible Bidders	3.1	<p>The bidder should be :</p> <p>A Registered Company with manufacturing facility in India for:</p> <ul style="list-style-type: none"> - SPV Cells / Modules OR - Motor-pump Sets OR - Solar Pumps Inverter/controller (Tested & Certified by MNRE accredited lab) (as per certificate from DIC). <p>OR</p> <p>A PV System Integrator and the 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).</p> <p>At least 5% of the tendered quantity (subject to maximum of 200 Nos.) Solar Photovoltaic Water Pumping Systems should have been installed & commissioned by the bidder under MNRE scheme in either of the State by the date of submission of technical bid.</p> <p>The bidder has financial capability to take up the proposed work to be supported by balance sheet for last three years {2013-14, 2014-15 & 2015-16} and there should be minimum average turnover of 15.00 crores per year in last three years. It is further clarified that the total turnover of last three years {2013-14, 2014-15 & 2015-16} should be 45.00 Crores or more. (Balance sheet of last three years or a summarized sheet of turnover certified by registered CA should be compulsorily enclosed).</p> <p>The Bidder should have valid CST / State VAT/ TIN registration certificate in Rajasthan. A copy of which should be enclosed.</p> <p>For New Entrants :</p> <p>Companies/ firms/ bidder with new technology will be empanelled subject to matching L1 prices. New Technology will be approved by RRECL with justification before opening financial bids of bidder with new technology. Companies/ firms/ bidder with new technology will be exempted from experience and turnover criteria.</p> <p>For this bidder should submit a write up on their technology with comparison with other technology. This is solely on consideration by the evaluation committee to accept/reject such proposals. Such entrepreneurs can only be considered subject to their meeting all specifications and the respective model matching the L1 price.</p>

		<p>New/ local and small entrepreneurs will be empanelled subject to matching L1 prices under two categories.</p> <p>FIRST CATEGORY- New /local entrepreneur should be registered under MNRE for NABARD programme to work in Rajasthan State/ Empanelled in any other state for SPV pump programme and received at least 5 work orders and commissioned the same number of pumps and Companies/ Firms worked for empanelled companies/firms of RHDS and installed and commissioned at least 50 solar pumps under distributorship/ dealership of empanelled companies /firms satisfactorily.</p> <p>Such New /local entrepreneur should have turnover of at least 50 Lakh for last three years. Such New /local entrepreneur will be allotted 10 percent of total work.</p> <p>SECOND CATEGORY- The New/ local small and medium entrepreneur bidders have financial capability to take up the proposed work to be supported by balance sheet for last three years {2013-14, 2014-15 & 2015-16} and there should be minimum average turnover of 10.00 crores per year in last three years. It is further clarified that the total turnover of last three years {2013-14, 2014-15 & 2015-16} should be 30.00 Crores or more. (Balance sheet of last three years or a summarized sheet of turnover certified by registered CA should be compulsorily enclosed).</p> <p>This category of New/ local small and medium entrepreneur bidders will be exempted from 10 percent work allotment.</p> <p>Other detail applicable to category first & second- All The New/ local small and medium entrepreneur bidders should be registered under MNRE for off grid/on grid solar programme/ solar pump programme of NABARD to work in Rajasthan state.</p> <p>Note-</p> <ol style="list-style-type: none"> a. The bidder must fill up above information clearly in enclosed sheet and attach all required documents (Self attested) in support as at a glance Techno - Commercial qualification details. b. If supporting documents (Self attested) are not attached for each eligible criteria above, the bid shall be rejected without further reference. c. Cutting should be verified by the signature with seal on every attempt and overwriting not allowed. d. If any document submitted in support of above parameters found false, the tender will be disqualified and EMD and security Deposit shall be forfeited and bidder shall be blacklisted. <p>All successful bidder will have to submit Test Certificate for the Model of Solar Water Pumping System (with particular company whose panel has been supplied) from a MNRE authorized testing centre (Test Certificate should have been issued as per MNRE guidelines 2015-16) at the time of Pre Dispatch Inspection (PDI).</p>
	3.2	Bidders shall provide such evidence of their eligibility as required hereinafter.

		3.3	The bidder should be approved/ recognised/ empanelled/ channel partner with MNRE/ RRECL/ RHDS or Department of Horticulture, Jaipur, Rajasthan. The bidder shall be required to provide source of the material outsourced.
		3.4	For the purposes of this Clause, the term “material” includes the material/ components required to supply and commissioning of Solar Photovoltaic (SPV) Pump as prescribed in this bid document.
4.	One bid per bidder and conflict of interest	4.1	One bidder shall submit only one bid. A bidder who submits or participates in more than one bid for a particular Work shall be disqualified.
		4.2	Bidders found to be in conflict of interest shall be disqualified.
5.	Contents of Bidding Document	5.1	All bidders shall provide documentary evidence for package.
		5.2	Bidders shall also provide in package, descriptions of proposed work methods and time schedules in sufficient detail including drawings and charts as necessary, to demonstrate the adequacy of the bidder’s capacity to meet the quality of work, and the completion time. The bidder shall also provide sufficient details about the personnel to be engaged for both packages.
		5.3	In addition to the above, bids submitted by a private/ public limited company shall comply with the following requirements:
		(a)	The submitted bid and the Form of Agreement, in case of successful bid, shall be signed/ electrically signed by an authorized representative of the bidder so as to be legally binding on the bidder.
		(b)	One of the representatives shall be authorized to be in charge and this authority shall be evidenced by submitting a power of attorney signed by legally authorized signatory(ies) of the company;
		(c)	The lead representative shall be authorized to incur liabilities, receive payments and receive instructions for and on behalf of any or all representatives and the entire execution of the Contract including payment shall be done exclusively with the manufacturing firm; and the same shall be applicable to an authorized representative of a company.
		(d)	All representatives shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included.
6.	Contents of Bidding Document	6.1	The bid document consists of two volumes, and shall be filled in separately
			Vol. I: 1. Instructions to bidders 2. Scope of work 3. General Conditions of Contract 4. Bid data sheet 5. Bidding forms
		6.2	Vol. II: 1. Financial Bid 2. Any other supporting document
		6.3	The Invitation for Bids issued by the RHDS, Jaipur shall be a part of the Bidding Document.
		6.4	The RHDS is not responsible for incomplete Bidding Document and its addenda if they had not been obtained directly from the RHDS, Jaipur.

		6.5	Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the Bid.
7.	Clarification of Bidding Document	7.1	A prospective Bidder requiring any clarification of the Bidding Document shall contact the RHDS, JAIPUR in writing at RHDS, JAIPUR's address indicated in the EOI and this Bid Document.
8.	Amendment of Bidding Document	8.1	At any time, not being less than 5 days prior to the deadline for submission of the Bids, i.e. till 17.04.2017, RHDS may amend the Bidding Document by issuing addenda/ corrigenda.
		8.2	Any addenda/ corrigenda issued shall be part of the Bidding Document and shall be communicated online on website https://eproc.rajasthan.gov.in .
		8.3	To give prospective Bidders reasonable time in which to take any addendum/ corrigendum into account in preparing their Bids, RHDS, Jaipur may, at its discretion, extend the deadline for the submission of the Bids, and may also make changes in the time schedules prescribed elsewhere in this document.
9.	Cost of Bidding	9.1	The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the RHDS, JAIPUR shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
10.	Language of Bid	10.1	The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the RHDS, JAIPUR, shall be written in the English language.
11.	Documents Comprising the Bid	11.1	The bid shall be submitted as follows: The Entire EOI document duly signed and bid proposals are to be submitted only online in electronic form on website https://eproc.rajasthan.gov.in . It contains 2 covers/ parts. Contents of each part shall be as follows (submit in the same order):
		(a)	Cover/ Part I (Technical bid I) 1. The Bid documents cost Rs. 1000.00 only in form of DD in favour of Member Secretary, RHDS, Jaipur that will be non refundable. 2. The processing cost Rs. 1000.00 only in form of DD in favour of MD, RISL, Jaipur. 3 Bid Security in favour of Member Secretary, RHDS, JAIPUR for an amount of Rs 10.00 lac (for new /local entrepreneur category first) and Rs 40.00 lac (for all others) only in form of DD or Bank guarantee (Valid for One year). By a reputed International Bank or an Indian Scheduled Bank acceptable to RHDS (EOI document no. VIII). 3. In lieu of bid security, a bid securing declaration shall be taken form Departments' of the State Government and undertaking, Corporations, Autonomous bodies, Registered Societies, Cooperative Societies which are owned or controlled or managed by the state Government and Government Undertakings of the Central Government.
		(b)	Note : Original DDs/ BG should be submitted to RHDS before technical Bid opening. Cover/ Part II (Technical bid II) 4. Bid Forms for Technical Proposal (format No. 1 to 13) 5. TIN/Sales Tax/ CST/ VAT Clearance Certificate 6. Original Documents pertaining to Ownership 7. Power of Attorney, if required 8. Accreditation/ approval/Channel partner/ certification of firm from MNRE or other institute.

			<p>9. All type tests/ routine tests conducted at MNRE/ STQC/CPRI/TUV RI/UL approved Test Houses.</p> <p>10. ISI, IEC, ISO (9001& 14001) and other certification, if any</p> <p>11. Internal quality control/ quality assurance plan and the testing facilities.</p> <p>12. Details of manufacturing facility and capacity.</p> <p>13. Technical specifications for solar module/ panel, pumps, controller/inverter, support and other accessories.</p> <p>14. Maintenance and after sales services along with the supply network in the state.</p> <p>15. Details of skilled manpower.</p> <p>16. Financial Statements (Annual Audited Reports of at least 3 years, etc.),</p> <p>17. Experience Certificates,</p> <p>18. Drawings/ charts and any other material required to be submitted or the bidder may wish to submit to fulfil the bid requirement.</p> <p>19. Complete literature and specifications of the material offered.</p> <p>(c) 20. The Entire EOI document duly signed must be submitted online in electronic form on website https://eproc.rajasthan.gov.in.</p> <p>21. Any other document specified in this Bid Document.</p> <p>Cover/ Part III (Financial bid)</p> <p>1. Price Proposal Submission Sheet, i.e. financial Bid (logical minimum competitive offers needs to be submitted, however, any bidders who underbids with the bad intention will be treated as fraud & will be liable for legal action)</p> <p>2. Any other document specified in this Bid Document.</p>
		11.2	As a first step, at the pre-announced time and date, Cover/ Part 'I' will be opened online for each participating bidder to make sure that the bidder has furnished Bid cost and Security. Consequently eligible proposals will be processed for Cover/ part II to ensure Sales Tax Clearance Certificate, technical qualification, etc. The Technical Proposals shall be evaluated first by the RHDS, JAIPUR. No amendments or changes to the Technical Proposals would be permitted after submission. Bids with Technical Proposals which do not conform to the specified requirements shall be rejected as deficient Bids and shall be rejected.
		11.3	Price Proposals of technically compliant Bids shall be opened online at a date and time advised by the RHDS, JAIPUR. The Price Proposals shall be evaluated as prescribed and the task shall be awarded either to the Bidder whose Bid is determined to be the lowest evaluated substantially responsive Bid for Package or the eligible company will be empanelled to perform the task.
		11.4	The Price Proposal shall contain the following:
		(a)	Price Proposal Submission Sheet, i.e. Form of Bid completed in full compliance with clause 13
		(b)	Any other document required.
12.	Bid Submission Sheets	12.1	The Bidder shall submit the Technical Proposal and the Price Proposal using the appropriate Bidding Forms. These forms must be completed without any alterations to their format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

13.	Bid Prices and Discounts	13.1	The RHDS shall endeavour to award the task either to a single firm for the whole work as described in the package or empanel the eligible firms.
		13.2	The bidder shall quote rates clearly and no alterations or additions shall be made to the Schedule by the bidder.
		13.3	All duties, taxes and other levies etc. payable by the bidder under the Contract, or for any other cause, shall be included in the rates and prices and the total bid price submitted by the bidder.
		13.4	The rates and prices quoted by the bidder shall remain fixed and valid for the duration of the contract and would not be subject to variation on any account.
14.	Currency of Bid and Payment	14.1	The unit rates and prices shall be quoted by the Bidder in Indian Rupees.
15.	Period of Validity of Bids	15.1	Bids shall remain valid for a period of one year after the bid submission deadline date prescribed by the RHDS, JAIPUR.
		15.2	In exceptional circumstances, prior to the expiry of the bid validity period, RHDS, JAIPUR may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. The Bid Security shall also be extended for the corresponding period. A Bidder may refuse to concede to the request to extend validity of his Bid without forfeiting his Bid Security.
16.	Pre-bid Meeting	16.1	This meeting will be held on 06.04.2017 and the Final Bid Document would incorporate the acceptable suggestions to be received during the conference.
17.	Signing of Bid	17.1	The signatory Authority shall electronically sign all pages of the Technical Proposal and Financial Proposal submitted by him.
		17.2	Supporting documents shall be submitted in the following manner:
		(a)	The Bidder shall prepare one set of support documents for technical proposals and submit online the same in Part 'I & II' as " TECHNICAL PROPOSAL ",
		(b)	The bidder shall also prepare one set of support documents for financial proposals and submit online the same in Part 'III' as " FINANCIAL PROPOSAL "
		(c)	The Bid proposals and documents should be uploaded in order as envisaged.
		17.3	The Bid shall contain no alterations, omissions or additions, except in accordance with instructions issued by the RHDS, Jaipur.
		17.4	The Bidder shall furnish information requested in the Price Proposal.
18.	Submission of Bids	18.1	The EO/ bid proposals will be submitted online at the prescribed site. The interested firm should be well acquainted with e-procurement process & DSC.
19.	Deadline for Submission of Bids	19.1	Online Submission dates: During normal office hours from 18.04.2017 (5.00 pm) to 28.04.2017 (till 5.00 pm) in favour of the Member Secretary and Mission Director, RHDS, Directorate of Horticulture, Pant Krishi Bhawan, JAIPUR.
		19.2	The RHDS, JAIPUR may, at its discretion, extend the deadline for submission of bids by issuing an addendum, in which case all rights and obligations of the RHDS, JAIPUR and the bids previously subject to the original deadline shall thereafter be subject to the deadline as extended.
20.	Late Bids	20.1	Physical Submission received by the RHDS, JAIPUR after the deadline for submission prescribed in Clause 19 shall not be accepted online.

21.	Withdrawal, Substitution, and Modification of Bids	21.1	The bidders should well acquaint with the process of e-tendering on https://eproc.rajasthan.gov.in . The bidders may get training/ assistance for the same from e-Procurement Help Desk, Phone No. 0141-4022688 e-mail : eproc@rajasthan.gov.in
22.	Bid Opening	22.1	The Bid opening shall take place online, on the date and time specified in the Bid Document.
		22.2	The time and date of the Bid opening of the price proposals shall be as hereinafter notified.
		22.3	First, Part I technical bid shall be opened online.
		22.4	The bid with required fees and security will be accepted.
		22.5	Next, the eligible proposals will be processed for Part II technical bid opening.
		22.6	All the technical proposals will be evaluated by RHDS and deficit will be rejected at this stage.
		22.7	Next, the eligible proposals will be processed for Part III technical bid opening.
		22.8	Part 'III' containing the Financial proposals shall be opened only of those bidders who have been found to satisfactorily furnish technical proposals Part I & II. At the end of the evaluation of the Technical Proposals, the RHDS, Jaipur will decide to open the bids which have substantially responsive Technical Proposals and who have been determined as being qualified for award for opening of the Price Proposals. The time and date of the Bid opening of the price proposals is being notified in this Document. Any change in the already announced programme for opening of Financial Bids shall be notified by the RHDS, JAIPUR online. The change can be only for a later date.
		22.9	The RHDS, Jaipur shall conduct the opening of Price Proposals of all Bidders who submitted substantially responsive Technical Proposals, date and time specified by the RHDS, Jaipur.
23.	Confidentiality	23.1	Information relating to the examination, evaluation and comparison of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on task award is communicated to all Bidders.
		23.2	Any attempt by a Bidder to influence the RHDS, Jaipur in the examination, evaluation, and comparison of the Bids or Contract award decisions may result in the rejection of his Bid.
24.	Clarification of Bids	24.1	To assist in the examination, evaluation, comparison and post-qualification of the Bids, the RHDS, Jaipur may, at its discretion, ask any Bidder for a clarification of its Bid.
		24.2	Subject to Sub Clause 24.1, no bidder shall contact the RHDS, Jaipur on any matter relating to its bid from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the RHDS, Jaipur, it should do so in writing. It will be at the discretion of RHDS, Jaipur to entertain or not to entertain such additional information voluntarily furnished by the bidder.
25.	Preliminary Examination of Bids & Responsiveness of Technical Proposal	25.1	Prior to the detailed evaluation of Technical bids, the RHDS, Jaipur will determine whether each bid (i) meets the eligibility criteria; (ii) has been properly submitted with required documents; (iii) is accompanied by the required securities; (iv) is substantially responsive to the requirements of the bidding documents For the purpose of eligibility, Turn Over will be taken care of.

		25.2	The RHDS, JAIPUR's determination of the responsiveness of a Technical Proposal shall be based on the contents of the Technical Proposal itself.
		25.3	A substantially responsive Technical proposal is one, which conforms to all the terms, conditions and specifications of the bidding documents.
		25.4	If a Technical Proposal is not substantially responsive it will be rejected by the RHDS, JAIPUR. Conditional bids would be deemed to be not substantially responsive, and shall be rejected by the RHDS. <u>RHDS reserves the right to consider even a single substantially responsive bid after the approval of its Executive Committee.</u>
26.	Non-conformities, Errors, and Omissions	26.1	Provided that if a Technical Proposal is substantially responsive, the RHDS, JAIPUR may waive any non-conformity or omission in the Bid that does not constitute a material deviation.
		26.2	Provided that a Technical Proposal is substantially responsive, the RHDS, JAIPUR may request that the Bidder submits the necessary information or documentation, within a reasonable period of time, to rectify non-material, non-conformities or omissions in the Technical Proposal related to documentation requirements. Such omission shall not be related to any aspect of the Price Proposal of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
		26.3	Provided that the Technical Proposal is substantially responsive, the RHDS, JAIPUR will correct arithmetical errors during evaluation of Price Proposals on the following basis:
		(a)	When there is a difference between the rates in figures and words, lower of the two rates shall be taken as correct rate.
		(b)	When the rate quoted by the bidder in figures and words tallies, but the amount is not worked out correctly, the rate quoted by the bidder shall be taken as correct and not the amount as worked out.
		26.4	The amount stated in the Form of Bid would be adjusted by the RHDS, JAIPUR in accordance with the above procedure for the correction of errors and shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, his bid shall be rejected, and the bid security shall be forfeited. A party not indicating its Turn Over and Financial data for at least three preceding years shall be disqualified.
27.	Examination of Terms and Conditions;	27.1	The RHDS, JAIPUR shall examine the Bids to confirm that the Bidder without any material deviation or reservation has accepted all terms and conditions.
		27.2	The RHDS, JAIPUR shall evaluate the technical aspects of the Bid submitted in accordance with this Bid Document to confirm that all requirements specified in Scope of Work of the Bidding Document have been met without any material deviation or reservation.
		27.3	If, after the examination of the terms and conditions and the technical evaluation, the RHDS, JAIPUR determines that the Technical Proposal is not substantially responsive in accordance with Clause 25, it shall reject the Bid.
28.	Technical Evaluation & Comparison of Price Proposals	28.1	The RHDS, JAIPUR will evaluate and compare the Price Proposal of each bid determined to be substantially Technically responsive in accordance with Clause 25 and qualified for award of task in accordance with Clause 5.

		(a)	Like the opening of Technical Proposal, following the opening of Price Proposals, the RHDS, JAIPUR shall examine the Price Proposals to confirm that all documents and financial documentation requested in Sub- Clause 11.4 have been provided, and to determine the completeness of each document submitted.
		(b)	In evaluating the bids, the RHDS, JAIPUR will determine for each bid the Evaluated Bid Price by adjusting the bid price as follows: a) Making any correction for errors pursuant to Clause 26; b) Making an appropriate adjustment for any other acceptable variations, deviations or alternative offers submitted.
		28.2	The RHDS, JAIPUR reserves the right to accept or reject any variation/ deviation. Any variations/ deviations and other factors which are in excess of the requirements of the bidding documents or otherwise result in the accrual of unsolicited benefits to the RHDS, JAIPUR shall not be taken into account in the bid evaluation.
		28.3	The RHDS, JAIPUR shall compare the evaluated Bid prices of all substantially responsive bids to determine the lowest-evaluated Bid.
29.	RHDS, JAIPUR's Right to Accept Any Bid, and to Reject Any or All Bids	29.1	Notwithstanding Clause 30, the RHDS, JAIPUR reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the RHDS, JAIPUR's action.
30.	Award Criteria	30.1	As per point no. 33 of EOI document. The RHDS may inspect the facilities before award the task/ empanelment.
31.	Notification of Award	31.1	The Bidder whose Bid is found acceptable/ eligible for empanelment shall be notified of the award by the RHDS, prior to the expiry of the bid validity period, through a Letter of Acceptance/ empanelment.
32.	Signing of Agreement	32.1	Within 10 days following the notification of award along with the Letter of Acceptance, the RHDS, JAIPUR shall send to the successful Bidder/ firm a signed Agreement that incorporates all agreements between the RHDS, JAIPUR and the successful Bidder.
		32.2	<p>Within ten (10) days of receipt of the Agreement, the Successful Bidder shall sign, date and return the agreement to the RHDS, JAIPUR. Failure of the successful Bidder to sign the Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. Along with the agreement, a Performance Security in the form of a Bank Guarantee of Rs 100.00 lac shall be submitted in favour Member Secretary, RHDS, JAIPUR with a validity of 1 year.</p> <p>For new /local entrepreneur under category first a Performance Security in the form of a Bank Guarantee of Rs 25.00 lac shall be submitted in favour Member Secretary, RHDS, JAIPUR with a validity of 1 year.</p> <p>The bid security will be returned to unsuccessful bidders.</p> <p>In lieu of bid security, a bid securing declaration shall be taken form Departments' of the State Government and undertaking, Corporations, Autonomous bodies, Registered Societies, Cooperative Societies which are owned or controlled or managed by the state Government and Government Undertakings of the Central Government.</p>

		32.3	Empanelled firm/ company will have to also submit BG of 10% of system cost for a period of five year against maintenance security before claiming 70% payment against the number of solar pump supplied to farmers.
33.	Mode of award of targets	33.1	New /local entrepreneur under category first will be allotted 10 percent of total work. L-1 Prices will be decided by RHDS/RRECL based on L-1 Prices offered by bidders and Market survey report prepared by committee before opening financial bid by keeping in mind rates prevailing in the market and prices decided by tender in other states. Terms and condition of EOI /tender will also be kept in mind while evaluating the rates with the EOI/ tender of other states. Base rate of MNRE may also be taken in to consideration while giving counter offer to suppliers.
		33.2	RHDS will review the progress after three months to access the working of the firms (New /local entrepreneurs allotted 10 percent target). If the progress noted very poor, the allocated target can be curtailed and awarded to other firms.
34.	Steps to take up the work	34.1	The Empanelled firm will take list of prospective beneficiaries from district level offices of DHDS and motivate the interested beneficiaries in their favour and execute tri-party agreement as per document. The bidder will submit the tri-party agreement to District level office of Horticulture and obtain work order issued by DD/AD, Horticulture of the beneficiary in his favour.
		34.2	The Empanelled firm shall complete the readiness of material for supply and submit their request for Pre-despatch inspection to RHDS/ Rajasthan Renewable Energy Corporation (RREC). RHDS/ RREC will depute inspector for inspection of material at works of the supplier.
		34.3	RHDS / RREC will issue material acceptance after inspection of material and despatch clearance to the supplier.
		34.4	Then, the Empanelled firm will arrange supply of material in field for further installation and commissioning of systems.
		34.5	The firm will essentially develop a an Operation and Maintenance Manual to register complete details from supply of material to AMC of system for Five years and will be made available to the beneficiary at the time of initial supply of material. All material details such as : <ol style="list-style-type: none"> 1. SPV Modules (Make, PV capacity of each Module, Module Numbers). 2. Structure Type (Manual Tracking/Auto tracking). 3. Pump { Make;, Model, Number}, 4. Pump Motor { Make;, Model, Number} 5. Controller { Make;, Model, Number} and 6. Other Balance of System (BoS) details in brief will be recorded with signature & seal of supplier firm and made available to beneficiary. <p>Further every step should be recorded in this booklet with dates. Sufficient pages for AMC service record for 5 Years should be provided in this booklet.</p> <p>An Operation and Maintenance Manual, in farmer friendly Hindi language, should be provided with the solar PV pumping system. The Manual should have information about solar energy, photovoltaic, modules, DC/AC motor pump set, tracking system, mounting structures, electronics and switches as per the details given above. 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</p>

			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.
		34.6	<p>Firm can submit claim of beneficiary share to DD/AD, DHDS office after work order and supply of material. For remaining allowed payment on material supply DD/AD, DHDS office will forward the documents to RHDS Head office as per guidelines & terms and conditions of the tender/EOI.</p> <p>As per the present guidelines subsidy will be permissible only upto 5HP.</p> <p>Advance payment of farmer share Rs. 1,00,000/- (one lac) in case of 5 HP SPV pumps and Rs. 75,000/- (seventy five thousand) in case of 3HP SPV pumps will be given by DD/AD, DHDS office along with work order.</p>
		34.7	<p>After completing installation and commissioning of system, the firm shall submit the documents as per EOI document to AD/DD, DHDS. DHDS officer and Field officer of RREC/nominated by RHDS will jointly inspect and Physically verify the system and submit the report /documents along with Photograph to AD/DD, DHDS which finally forward the same to RHDS for final payment as per terms & conditions of the tender/EOI & guidelines.</p> <p>As per the present guidelines subsidy will be permissible only upto 5HP.</p>
		34.8	The Empanelled firm shall attend the systems on break down of system and for regular AMC. All AMC visits should be recorded in the booklet of beneficiary with details for faults noted and rectification made with dates.
		34.9	RHDS/RREC officers can visit and inspect the systems for taking performance of systems.

(II) Scope of work

II.1 General Project Information:

The information given hereunder and provided elsewhere in this document is given in good faith by the RHDS but the bidder must satisfy himself regarding quantity and quality wise supply of Solar module/ panel, Solar Photovoltaic (SPV) Pump and GI support structure and all aspects commissioning of solar infrastructural facility and its maintenance services for 10 years (It includes 5 years guarantee period and there after the sale services of 5 years at the cost of beneficiaries including guarantee period) and no claim shall be entertained on the plea that the information supplied by the RHDS is erroneous or insufficient. **The supplier firm will provide solar pump testing facility at manufacturing site.**

II.2 Project Location:

Looking to the bright prospects of Hi-tech Horticulture/ Agriculture in the state, the project will be implemented in all districts of Rajasthan. The lands may belong to the farmers of the concerned districts. Project comprises of two parts as:

II.3 Package:

1. Supply of solar photovoltaic (SPV) water pumping system.
2. Commissioning of solar pumping infrastructural facility and its maintenance and after sales services for 10 years (It includes 5 years guarantee period). The firm is also required to establish the customer care centre, farmer trainings on service centre and toll free number and upload the data on departmental website.

II.3.1 Supply of solar photovoltaic (SPV) water pumping system

Technical specification Details:

I. INTRODUCTION

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

1. PV array :

- Capacity in the range of **200 Wp to 10 KWp .**
- Should be mounted on a suitable structure with a provision of tracking the sun

2. 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

3. Electronics :

- Maximum Power Point Tracker (MPPT)
- Inverter for A.C. Motors (Appropriate Electronic Controller in case of B.L.D.C.)
- Controls / Protections.

4. Interconnect Cables and "On-Off" switch.

II. PERFORMANCE SPECIFICATIONS AND REQUIREMENTS (DUTY CYCLE)

Solar PV Water Pumps with PV array capacity in the range of 200 Watt to 5 KWp may be installed on a suitable bore-well, open well, Water Reservoir, Water stream, etc.

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:

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 metres (Suction head, if applicable, minimum of 7 metres) and with the shut off head being at least 12 metres.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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 I .

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 metres (Suction head, if applicable, minimum of 7 metres) and with the shut off head being at least 12 metres.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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 II.

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 200 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.

1. Modules supplied with the SPV water pumping systems should have certificate as per IEC 61215 specifications or equivalent National or International/ Standards.
2. Modules must qualify to IEC 61730 Part I and II for safety qualification testing.
3. The efficiency of the PV modules should be minimum 14% and fill factor should be more than 70%.
4. The terminal box on the module should have a provision for "Opening" for replacing the cable, if required.
5. There should be a Name Plate fixed inside the module which will give:
 - a. Name of the Bidder or Distinctive Logo.
 - b. Model Number
 - c. Serial Number
 - d. Year of manufacture
 - e. Project Name and Year (Rajasthan Solar Pumping Project 2017-18)
6. Each PV module must use a RF identification tag (RFID), which must contain the following information:
 - (i) Name of the bidder of PV Module
 - (ii) Model or Type Number
 - (iii) Serial Number
 - (iv) Month and year of the manufacture
 - (v) I-V curve for the module
 - (vi) Peak Wattage of the module with volts
 - (vii) I_m , V_m and FF for the module
 - (viii) Unique Serial No and Model No of the module
 - (IX) Project Name and Year (Rajasthan Solar Pumping Project 2017-18)

IV. MOTOR PUMP-SET

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 Centres of the Ministry.

The "Motor Pump Set" should have a capacity in the range of 0.2 Hp to 10 Hp and should have the following features:

1. 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.
2. The motor of the capacity ranging from 0.2 hp to 10 hp should be AC, PMDC or BLDC type. The suction and delivery head will depend on the site specific condition of the field.
3. Submersible pumps could also be used according to the dynamic head of the site at which the pump is to be used.
4. It is recommended that all parts of the pump and the motor of the submersible pumps should be made of stainless steel. - The bidders 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.
5. The suction/ delivery pipe (GI/HDPE), electric cables, floating assembly, civil work and other fittings required to install the system.
6. 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.
7. **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. All expenditure including SIM charge up to 5 year will have to be borne by supplier.

Detail of RMM is as under –

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 device/equipment associated with RMM shall be provided by the SPV water pump Supplier.

The RMM should have following features :- Web portal to view on line data such as voltage, current, power, energy generated and pump on/off duration.

Provision for generation of various reports in the printable format.

Data shall be extracted locally and uploaded to the server in the event of loss of communication.

Provision for data export in standard format.

Historical data made available in server for report generation.

The sample log book deployed for output data and performance of the SPV water pump:-

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

S.N.	Parameter Name	Unit	Result	Data (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 output	Ltr		
5	Pump on/off			

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 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 fitting required to install the Motor Pump set.

The approval of outsourced pump would be short listed on the basis of performance data/ specifications submitted by the firm.

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.

The structure design (along with the civil work) declared by the bidder should technically be full proof/ sufficiently strong against the prevailing wind load. The manufacturing firm will be fully responsible for any damages caused by high wind velocity within guarantee period. Structural design and drawing should be duly approved/ recognised by any Engineering Institute/chartered engineer for this project. The parameters of prevailing wind speed, soil conditions, load and upward lift should be taken care of while preparing the design and the same is required to be mentioned on design.

However, bidder/ supplier shall ensure that mounting structure is efficient, strong enough to sustain load and is capable against high wind velocity.

VI. ELECTRONICS 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. The inverter must have IP 54 protection or must be housed in a cabinet having at least IP54 protection.
4. 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.
5. 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.

VII. OTHER ASSESSORIES

The suction/ delivery pipe (BIS, ISI: GI/HDPE), electric cables (specification should be declared as per requirement of model), floating assembly (HDPE in case of surface/ open water bodies), civil work (As per civil design against wind load protection) and other fittings required to install the system. The supplier / empanelled firm is required to provide the maintenance manual to the beneficiaries. One Home lighting system and fencing will be the integral part of system in the same assistance level. The firm will declare overall efficiency of the system.

Supplier will have to provide fencing mandatory of the solar system to ensure the security and safety with following specification :- (Angle iron (with red oxide and Black paint coating) 35x35x5mm

Distance between two polls 2.5 mtr. with corner angle iron support.

Fencing height – 5 ft.

Gate size – 3x5 ft. (with lock provision)

Foundation of cement & concrete (1x1x1.5ft)

Set back (from module last point) (1 mtr. North, 2 mtr. South, 2 mtr. East – West))

Thickness (2mm) Mesh wire or 16 gauge thickness barbed wire.

ON/OFF SWITCH

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, Controller / Inverter and the motor pump set.

VIII. PERFORMANCE SPECIFICATIONS AND WARRANTY

Solar PV Water Pumps with PV module capacity in the range of 200 Watt to 5 KWp may be installed on a suitable bore-well / open well / Water Reservoir / Water stream etc. Indicative Performance Specifications for the Shallow and Deep well SPV Water Pumping Systems are given in the Annexure I & II.

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. Also refer para **II.3.2.4.**

IX. NOTES

1. 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 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 centres of the Ministry to meet the performance and water discharge norms specified in section II above.
3. The beneficiary may select an appropriate Model (i. e. Capacity of PV Array and Type of Motor Pump Set) as per site requirement.

Indicative Technical Specifications

Description	With D.C. Motor Pump Set with Brushes or Brush Less D.C. (B.L.D.C.)												
	Shallow Well (Surface) Solar Pumping Systems	Solar Deep well (submersible) Pumping Systems											
	Model-III	Model III	Model IV	Model V	Model VI	Model VII	Model VIII	Model-IX	Model-X	Model-XI	Model-XII	Model-XIII	Model-XIV
PV array	2700 Wp	3000 Wp	3000 Wp	3000 Wp	4800 Wp	4800 Wp	4800 Wp	6750 Wp	6750 Wp	6750 Wp	9,000 Wp	9,000 Wp	9,000 Wp
Motor capacity /Motor pump set type	3 HP	3 HP Submersible with electronic controller	3 HP Submersible with electronic controller	3 HP Submersible with electronic controller	5 HP Submersible with electronic controller	5 HP Submersible with electronic controller	5 HP Submersible with electronic controller	7.5 HP Submersible with electronic controller	7.5 HP Submersible with electronic controller	7.5 HP Submersible with electronic controller	10 HP Submersible with electronic controller	10 HP Submersible with electronic controller	10 HP Submersible with electronic controller
Shut Off Dynamic Head	25metres	45 Metres	75 Metres	100 Metres	70 Metres	100 Metres	150 Metres	70 metres	100 metres	150 metres	70 metres	100 metres	150 metres
Water Output*	1,35,000 litres per day from a total head of 20 metres	105,000 litres per day from a total head of 30 mtrs	63,000 litres per day from a total head of 50 mtrs	42,000 litres per day from a total head of 70 mtrs	1,00,800 litres per day from a total head of 50 mtrs	67,200 litres per day from a total head of 70 mtrs	45,600 litres per day from a total head of 100 mtrs	141,750 litres per day from a total head of 50 metres	94,500 litres per day from a total head of 70 metres	64,125 litres per day from a total head of 100 metres	189,000 litres per day from a total head of 50 metres	126,000 litres per day from a total head of 70 metres	85,500 litres per day from a total head of 100 metres

Annexure II

Description	With A.C. Induction Motor Pump Set and a suitable Inverter:															
	Shallow Well (Surface) Solar Pumping Systems				Solar Deep well (submersible) Pumping Systems											
	Model-III	Model IV	Model V	Model VI	Model III	Model IV	Model V	Model VI	Model VII	Model VIII	Model IX	Model X	Model XI	Model XII	Model XIII	Model XIV
PV array	2700 Wp	2700 Wp	4800 Wp	4800 Wp	3000 Wp	3000 Wp	3000 Wp	4800 Wp	4800 Wp	4800 Wp	6750 Wp	6750 Wp	6750 Wp	9,000 Wp	9,000 Wp	9,000 Wp
Motor capacity /Motor pump set type	3 hp	3 hp	5 hp	5 hp	3 hp Submersible with electronic controller	3 hp Submersible with electronic controller	3 hp Submersible with electronic controller	5 hp Submersible with electronic controller	5 hp Submersible with electronic controller	5 hp Submersible with electronic controller	7.5 hp Submersible with electronic controller	7.5 hp Submersible with electronic controller	7.5 hp Submersible with electronic controller	10 hp Submersible with electronic controller	10 hp Submersible with electronic controller	10 hp Submersible with electronic controller
Shut Off Dynamic Head	15 metres	25 metres	15 metres	30 metres	45 metres	75 metres	100 metres	70 metres	100 metres	150 metres	70 metres	100 metres	150 metres	70 metres	100 metres	150 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	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	128,250 litres per day from a total head of 50 metres	87,750 litres per day from a total head of 70 metres	57,375 litres per day from a total head of 100 metres	171,000 litres per day from a total head of 50 metres	117,000 litres per day from a total head of 70 metres	76,500 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. Suction head, if applicable, minimum 7 metres for shallow well (surface) solar pump system.
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.

Annexure II

Minimal Technical Requirements/Standards for off-grid/Stand-Alone solar photovoltaic (PV) power plants/systems to be deployed under the National Solar Mission (as per MNRE ordered dated 16.06.10)

Item/component	Applicable IEC/equivalent BIS Standard	
	Standard Description	Standard Number
PV Modules: Crystalline Silicon Terrestrial PV Modules	Must conform to the latest edition of IEC/equivalent BIS Standards for module design qualification and type approval.	IEC 61215 IEC 61415/IS14286 IEC 61730 Part 1 & 2
Power Conditioners/Inverters*	Efficiency Measurements Environmental Testing	IEC 61683, IEC 60068 2(6,21,27,30,75,78)
Charge controller/MPPT Units*	Design Qualification Environmental Testing	IEC 61093, IEC 60068 2(6,21,27,30,75,78)
Storage Batteries	General Requirements & Methods of Test Tubular Lead Acid	IEC 61427 IS 1651/IS 133369
Cables	General Test and Measuring Methods PVC insulated cables for working Voltages up to and including 1100 V-Do, UV resistant for outdoor installation	IEC 60189 IS 694/ IS 1554 IS/IEC 69947
Switches/ Circuit Breakers/Connectors	General Requirements Connectors-safety	IS/IEC 60947 part I,II,III
Junction Boxes/Enclosure	General Requirements	IP 65 (for outdoor)/IP 21 (for indoor) IEC 62208
SPV System Design	PV Stand-alone System design verification	IEC 62124
Installation Practices	Electrical installation of buildings Requirements for SPV power supply systems.	IEC 60364-7-712

*Must additionally conform to the relevant national/international Electrical Safety Standards.

** Also refer Addendum No. 32/49/2010-11-PVSE dated 19.08.2010

Testing and standards should be as per Jawaharlal Lal Nehru National Solar Mission. The supplier is supposed to produce IV curve for every panel at the time of billing/ supply for pre-dispatch/ after supply random testing.

The bidder is supposed to declare details of Solar Pump Models and Configuration as per the Technical Performa No. 13.

a. Time of Supply:

Within 45 days after issuance of work order

b. Quantum of work:

Expected quantity of SPV Pumping to be supplied under this EOI will be around 10,000 Nos.

c. Locations:

At the selected farmers' field of all 33 districts of the state.

II.3.2 Commissioning of solar infrastructural facility and its maintenance services for 10 years

1. Time of Commissioning:

Within 20 days after supply.

2. Quantum of work and location:

As specified in Package.

3. Technical backup to the beneficiaries:

The supplier firm is supposed to provide the operational and maintenance manual of the system in Hindi with farmers friendly language. A block wise/ district wise training of the beneficiaries regarding all the aspects of the system is required to be conducted by the supplying firm.

4. Guarantee, maintenance and after sales services :

1. It includes 5 years guarantee period and after sale services up to 10 years including guarantee period. The maintenance after guarantee period will be at the cost of beneficiaries. The firm is also required to establish the customer care centre, toll free number, farmer training on service centre and upload the data on departmental website.
2. The successful bidder/ empanelled firm shall assist the unit holder to file insurance claim and shall be responsible to bring an insurance claim to a final settlement. The successful bidder/ empanelled firm will be given system insurance for five years.
3. Maintenance arrangements: If the supplier company has commissioned one hundred or more units in a district during the last five financial years, including the present financial year, then it shall establish a customer care centre at that district headquarter staffed with at least one technical person whose name, mobile number and address shall be supplied to the concerned officers of Horticulture Department the farmer and also placed on the website.
4. The supplier company shall maintain the database as per annexure-A which may be revised from time to time and update it by every first day of the coming month. This information will be subsequently integrated on the website of the

Horticulture Department for which full assistance will be provided by the supplier company. It shall enter data for a new unit within 10 days of installation. The supplier company shall arrange inspection of the solar pump unit once in each quarter April-June, July-Sept, Oct-Dec and Jan-March up to the last quarter in which maintenance expires and report to the district unit of Horticulture Department. In addition to the above the supplier company will submit a maintenance plan.

5. The supplier company is expected to appreciate and understand the maintenance clauses with seriousness with the objective that the unit runs hassle-free and the farmer is not made to run from pillar to post for rectification in case of development fault (s) in the unit.
6. Complaints about fault (s) received by dak, telephone, fax, email or whatever communication method shall be attended within three working days by site visit etc.
7. The company is expected to stock adequate spare parts so that unit becomes operational within 5 days of complaint.
8. In case the company fails to maintain a unit, the bank guarantee shall be revoked and the decision of the Member Secretary/ Mission Director shall be final. Failure to maintain five or more units in a year will also cause black listing of the company for future supplies and the decision of the Member Secretary/ Mission Director shall be final.

Annex. A

Rajasthan Solar Pump Project: Beneficiary Information

Sr. No.	Name of beneficiary and father	Village	Gram Panchayat	Tehsil	District	Category (Gen./TSP/SCP)	Application serial number	Land holding	Wp 3000/4800	Head 20/50/75m	Pump AC/DC
1	2	3	4	5	6	7	8	9	10	11	13

manual/ Auto tracker	Surface / Submersible Pump	HLS System (Yes/ No)	Fencing (Yes/No)	Solar Panel/ Module (Capacity x Nos.)	Motor & pump (Bidder/ Model)	Indicative Unit Cost (Rs.)	Subsidy (Rs.) MNRE/ JNNSM	Subsidy (Rs.) State Resources	Total Subsidy (Rs.)	Material supply date	Commissioning date
14	15	16	17	18	19	20	21	22	23	24	25

Commissioning Year	Bill No. & date	Administrative Sanction No./date	Work Order No./date	Name of supplier firm	Name & address of service centre	Telephone contact of service centre	Telephone contact of beneficiary	Irrigated holding (ha)	Photo of beneficiary with stake holders	Sr Nos. of solar panels	Last maintenance date
26	27	28	29	30	31	32	33	34	35	36	37

The quantity and the specifications of the material to be supplied with technical design will be declared by the concerned firm.

(III) General Conditions of Contract

III.1. Definitions

Acceptance is the date when the Contract came into existence upon receipt by the Contractor of the **Letter of Acceptance** issued by the RHDS.

The **Contract** is the contract between the RHDS and the Contractor.

The **Contractor** is a person or Bidder or a company/ firm, Government owned entity or any combination of them whose bid to carry out the Works has been accepted by the RHDS.

The **Contractor's Bid** is the completed bidding document submitted by the Contractor to the RHDS.

The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; **Weeks** are calendar weeks; **Months** are calendar months.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the supply and commissioning solar pumping system. The Intended Completion Date is specified in the EOI. The Intended Completion Date may be revised only by the RHDS by issuing an extension of time.

The **Notice to Proceed** is the notice issued by the RHDS to the Contractor to proceed with the works.

The term **RHDS**, normally refers to the Member Secretary/ Mission Director, RHDS and any Committee or body formed by him for the purpose of the works under this Contract.

III.2. Payment Terms:

1. The prices should be quoted inclusive of component/ material wise and number wise cost, construction/ installation / maintenance charges, all handling, packaging, transportation and insurance charges to the point of execution.
2. The time successful for delivery and completion of work in the contract tender shall be deemed to be the essence of the contract and the successful bidder(s) shall arrange supplies & complete work within the period on receipt of order from the department/ RHDS.
3. Should the successful bidder(s) fail to complete the work in the period specified in the authorisation letter/ contract, the RHDS / department may at its discretion allow an extension in time of completion, subject to recovery from the bidder an agreed liquidated damages and not by way of penalty, a sum equal to the following percentage of the value of the systems which bidder has failed to supply/ Commissioning for period of delay as stated below : -
 - i. Delay up to one fourth period of the prescribed delivery/ commissioning period - 2.5%.
 - ii. Delay exceeding one fourth but not exceeding half of the prescribed delivery/ commissioning period - 5%.
 - iii. Delay exceeding half but not exceeding three fourth of the prescribed delivery/ commissioning period - 7.5%.
 - iv. Delay exceeding three fourth but not exceeds the period equal to the prescribed delivery/ commissioning period - 10%.

- 1- Fraction of a day in reckoning the period of delay in supply shall be eliminated if it is less than half a day.
 - 2- The maximum amount of agreed liquidated damages shall be 10%.
 - 3- If the supplier requires an extension of time in completion of contractual supply on account of occurrence for the same immediately on occurrence of the hindrance but not after the stipulated date of completion of supply.
 - 4- Delivery period may be extended with or without liquidated damages if the delay in supply of goods is on account of hindrances beyond the control of the bidder.
 - 5- Penalty on delayed commissioning will be deducted on final payment.
4. No Price escalation on account of any statutory increase in or fresh imposition of customs duty, excise duty, sales tax or duty leviable in respect of the systems authorised to be installed shall be application. But the benefit on account of decrease in these shall be available by the RHDS / department if accrued during the stipulated/ extended delivery period.

III.3. TERMINATION:

3.1 The RHDS or the Contractor may terminate the Contract if the other party causes a breach of the Contract.

3.2 Breaches of Contract include, but are not limited to:

- (a) The Contractor stops work when no stoppage of work is shown on the current program and the stoppage has not been authorized by the RHDS;
- (b) The RHDS instructs the Contractor/ firm to suspend the execution of work and the instruction is not withdrawn within 30 days;
- (c) The RHDS or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (d) The RHDS gives Notice that failure to correct a particular Defect is a breach of Contract and the Contractor fails to correct such Defect within a reasonable period of time determined by the RHDS;
- (e) The Contractor has delayed the supply and Commissioning of solar pumping system.
- (f) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing or in executing the Contract.

3.3 Notwithstanding the above, the RHDS may terminate the Contract at his convenience.

3.4 If the Contract is terminated the Contractor shall stop execution of works forthwith.

III.4. PAYMENT UPON TERMINATION

4.1 If the Contract is terminated because of a breach of Contract by the Contractor, the RHDS shall issue a certificate for the value of the work done plus any amount paid against materials/works ordered for Works less payments received up to the date of issue of the certificate and less the percentage of the value of the Works not completed. Liquidated Damages do not apply and the Employer has the right to damages in respect of any delay incurred arising from the breach. If the total amount due to the RHDS exceeds any payment due to the Contractor, the difference shall be a debt payable to the RHDS.

4.2 If the Contract is terminated at the RHDS's convenience or because of a breach of Contract by the RHDS, the RHDS shall issue a certificate for the value of the work done and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate.

III.5. DISPUTES

- 5.1 **RHDS Decision:** If any dispute of any kind whatsoever arises between the RHDS and the bidder in connection with, or arising out of, the Contract or the execution of the Works, whether during the execution of Works or after their completion, and before or after repudiation or other termination of the Contract, including any dispute as to:
- a) The quality of the workman ship or materials,
 - b) Any other question, claim, right matter or anything whatsoever in any way arising out of or relating to the supply and commissioning of solar system

The dispute shall, in the first place, be referred in writing to the Member Secretary/ Mission Director of RHDS who has jurisdiction over the Works specified in the Contract, with a copy to the other party. Such reference shall state that it is made pursuant to this Clause. Not later than 30 days after the day on which he received such reference the Member Secretary/ Mission Director of RHDS shall give written notice of his decision to the RHDS and the Contractor. Such decision shall state that it is made pursuant to this Clause. Subject to the other forms of settlement hereinafter provided, the decision of Member Secretary of RHDS in respect of every dispute or difference so referred shall be final and binding upon the Contractor and the RHDS. Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence and the Contractor and the RHDS shall give effect forthwith to every such decision of the RHDS until or unless the same shall be revised in an amicable settlement or as hereinafter provided.

- 5.2 **Remedy when the decision of Member Secretary/ Mission Director of RHDS is Not Accepted:** If either the RHDS or the Contractor be dissatisfied with any decision of the Member Secretary of RHDS, or if the Member Secretary of RHDS fails to give notice of his decision on or before 30 days after the day on which he received the reference, then either the RHDS or the Contractor may, on or before the 30 day after the day on which he received the notice of such decision, or on or before the twenty eighth day after the day on which the said period of 30th days expired, as the case may be, give notice to the other party, with a copy to the Member Secretary of RHDS, of his intention to commence proceedings before Secretary Horticulture in appeal. The Secretary, Horticulture shall decide the matter in appeal acting on behalf of the EC of RHDS.

If the Member Secretary of RHDS has given notice of his decision as to a matter in dispute to the RHDS and the Contractor and no written notice to commence arbitration has been given by either the RHDS or the Contractor on or before the 30th day after the day on which the parties received notice as to such decision from the Member Secretary of RHDS, the said decision shall become final and binding upon the RHDS and the Contractor. In case, a party remains dissatisfied with the decision of the Secretary Horticulture, it can refer the matter for Arbitration.

- 5.3 **Amicable Settlement:** Where notice of intention to commence arbitration has been given in accordance with Sub-Clause 5.2, arbitration shall not be commenced unless an attempt has first been made by the parties to settle the dispute amicably. Provided that, unless the parties otherwise agree, arbitration may be commenced on or after the fifty-sixth day after the day on which the notice of intention to commence arbitration was given, whether or not any attempt at amicable settlement thereof has been made.

- 5.4 **Arbitration:** Any dispute in respect of which:

- a) The decision, if any, of the Member Secretary of RHDS has not become final and binding pursuant to sub-clause 5.1, or in case either party remains dissatisfied with the decision of the Secretary Horticulture as in 5.2; or
- b) An amicable settlement has not been reached within the period stated in Sub-Clause 5.3, it shall be finally resolved by arbitration. The arbitration will take place in accordance with the Arbitration and Reconciliation Act, 1996 as applicable in India and the

arbitration shall take place at Jaipur. Each party shall appoint an Arbitrator and the two Arbitrators shall appoint an Umpire. Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the RHDS, the RHDS and the Contractor shall not be altered by reason of the arbitration being conducted during the progress of the Works. The decision of the Arbitral Tribunal shall be final and binding on both the parties.

- III.6. Force Majeure:** This clause may be allowed to be invoked by either party in case of extraordinary circumstances beyond the control of either party by the Executive Committee of the RHDS for termination or mitigation of liability. The decision of the Executive Committee of RHDS shall be final in this respect. The decision shall be arbitrable in terms of clause 5.4.
- III.7. Disclaimer Clause:** RHDS reserves the absolute and unqualified right to change, modify, add, alter or delete any clause of the Contract till it is signed and shall not bear any responsibility towards any damage caused to the Contractor on this account. RHDS also shall not be responsible for any loss suffered by the contractor on account of any unforeseen happening and shall not compensate the Contractor for the same
- III.8. Superintendence Clause:** The Executive Committee of RHDS is the final authority to decide any matter, either on reference or suo moto, which is otherwise being performed under its delegated authority by its officials under the terms prescribed in this Bid Document.

(IV) Bid Data Sheet

The following specific data for the works to be procured shall complement, amend, or supplement the provisions in General Instructions to Bidders. Whenever there is a conflict, the provisions herein shall prevail over those in the General Instructions to Bidders.

ITB 1.1	<p>The Employer is: Rajasthan Horticulture Development Society, Jaipur</p> <p>The authorized representative of the Employer is Mission Director/ Member Secretary, Directorate of Horticulture, Jaipur</p> <p>The reference to Invitation for Bids is: RHDS EOI</p> <p>The scope of work under this package will include supply of Solar Photovoltaic (SPV) Pump and Commissioning SPV pumps and maintenance</p>																																														
ITB 1.2	<p>I. Time of Supply within 45 days after issuance of work order</p> <p>II. Commissioning of facilities within 20 days of supply</p>																																														
ITB 3.1	<p>Eligible Bidders:</p> <p>As per the eligibility criteria given in EOI document.</p>																																														
ITB 4.1	<p>Each bidder shall submit only one bid, himself. A bidder who submits or participates in more than one bid for a particular Work shall be disqualified.</p>																																														
ITB 19.1 ITB 22.1 ITB 16.1 ITB 8.1 ITB 22 ITB 31.1 ITB 32.2	<p>Submission and opening of bids</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">1.</td> <td style="width: 55%;">Publishing EOI online</td> <td style="width: 20%;">27.03.2017</td> <td style="width: 20%;">11.00 AM</td> </tr> <tr> <td style="text-align: center;">2.</td> <td>EOI available for downloading on the website</td> <td>27.03.2017 (11.00 AM) to 28.04.2017 (11.00 AM)</td> <td></td> </tr> <tr> <td style="text-align: center;">3.</td> <td>Pre bid conference</td> <td>06.04.2017</td> <td>11.00 AM</td> </tr> <tr> <td style="text-align: center;">4.</td> <td>Amendments, if any by</td> <td>17.04.2017</td> <td>05.00 PM</td> </tr> <tr> <td style="text-align: center;">5.</td> <td>Time of submission of the offer-online</td> <td>18.04.2017 (5.00 PM) to 28.04.2017 (05.00 PM)</td> <td></td> </tr> <tr> <td style="text-align: center;">6.</td> <td>Opening of Technical Bids-online</td> <td>01.05.2017</td> <td>11.00 AM</td> </tr> <tr> <td style="text-align: center;">8.</td> <td>Finalization of Technical Bids</td> <td>After evaluation of technical bids</td> <td></td> </tr> <tr> <td style="text-align: center;">9.</td> <td>Opening of Financial Bids -online</td> <td>After finalization of technical bids</td> <td></td> </tr> <tr> <td style="text-align: center;">10.</td> <td>Negotiations, if required, on</td> <td>As per convenience</td> <td></td> </tr> <tr> <td style="text-align: center;">11.</td> <td>Empanelment/ Order of Award by</td> <td>After finalization of financial bid</td> <td></td> </tr> <tr> <td style="text-align: center;">12.</td> <td>Agreement</td> <td>Within 10 days of date of Award of Contract/empanelment</td> <td></td> </tr> </table> <p>The address: Member Secretary / Mission Director, Rajasthan Horticulture Development Society, Directorate of Horticulture, Pant Krishi Bhawan, Jaipur (Rajasthan), India.</p>			1.	Publishing EOI online	27.03.2017	11.00 AM	2.	EOI available for downloading on the website	27.03.2017 (11.00 AM) to 28.04.2017 (11.00 AM)		3.	Pre bid conference	06.04.2017	11.00 AM	4.	Amendments, if any by	17.04.2017	05.00 PM	5.	Time of submission of the offer-online	18.04.2017 (5.00 PM) to 28.04.2017 (05.00 PM)		6.	Opening of Technical Bids-online	01.05.2017	11.00 AM	8.	Finalization of Technical Bids	After evaluation of technical bids		9.	Opening of Financial Bids -online	After finalization of technical bids		10.	Negotiations, if required, on	As per convenience		11.	Empanelment/ Order of Award by	After finalization of financial bid		12.	Agreement	Within 10 days of date of Award of Contract/empanelment	
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(V) Technical Bidding forms

1. TECHNICAL PROPOSAL SUBMISSION SHEET

Name of package:

1. Supply of Solar panel, Solar Photovoltaic (SPV) Pump and GI support structure.
2. Commissioning of solar infrastructural facility and its maintenance services and after sales services for 10 years including 5 years' guarantee period.

To

Member Secretary/ Mission Director;
Rajasthan Horticulture Development Society,
Directorate of Horticulture,
Pant Krishi Bhawan, Jaipur (Rajasthan), India

Sir,

- 1 Having examined the Conditions of Contract, terms & conditions for the execution of the above named Works we, the undersigned, offer to execute and complete such works.
- 2 We undertake, if our bid is accepted, to commence the works as soon as is reasonably possible after receipt of the Member Secretary / Mission Director Notice to Proceed, but in no event later than seven (7) days thereafter, and to complete the whole of the Works comprised in the Contract within the time stated in the Bid.
- 3 We agree to treat the bid document and other records connected with the Works as secret and confidential documents and shall not communicate information described therein to any person other than the person authorized by you or use the information in any manner prejudicial to the safety of the Works.
- 4 We understand that you are not bound to accept the lowest or any proposal you may receive.
- 5 We are participating, as Bidders, in not more than one Bid in this Bidding process.
- 6 We enclose herewith an affidavit in the required format.

Yours faithfully;

Name of the applicant/ Bidder / Private/Public limited Company
Position held by the signatory

Encl: as above

Address:

2. AFFIDAVIT

(Enclosure to Technical Proposal Submission Sheet)

- 1 I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
- 2 The undersigned also hereby certifies that neither our firm M/s _____ has abandoned any work awarded to us by any department of Government of India or by any State Government nor any contract awarded to us for such works has been rescinded, during the last five years prior to the date of this bid.
- 3 The undersigned hereby authorize(s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by RHDS to verify this statement or regarding my (our) competence and general reputation.
- 4 The undersigned understands and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of RHDS.

Signed by an Authorized signatory of the firm

Title of the signatory

Name of the firm Date

(This affidavit is to be furnished on a non-judicial stamp paper of Rs. 100/-)

3. Schedule-I a

To establish its qualifications to perform the contract the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

Form - 1: Bidder's Information Sheet for Envelope 'T'

Bidder's Information	
Bidder's legal name (In case of Private Limited Company name of company be mentioned)	
In case of outsourcing with company legal name of each partner	
Bidder's country of constitution	
Bidder's year of constitution	
Bidder's legal address in country of constitution	
Bidder's authorized representative (Name, address, telephone numbers, fax numbers, e-mail address)	
Attached are copies of the necessary original documents. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	

4. Schedule-I b

Firm profile at a glance

S. No.	Particulars
1	Name & Mailing Address of firm
2	Contact Person Name, Designation & Contact No.
3	E-mail Address for correspondence
4	Firm Website Address
5	Firm Status (Private/ PSU/ Incorporate/Proprietor)
6	Establish Year of firm
7	PAN/ TAN No.
8	Firm Registration No/ ROC
9	EPF Registration No, if applicable
10	STR/ VAT/ TIN No
11	Bank name & contact No
12	Turnover 2013-14, 2014-15 and 2015-16 Rs. in Crore
13	Company Profile (<100 words)
14	Factory Address & Floor Area of factory
15	Floor
16	Self Manufacturing facilities & Capacity (A list of machinery be attached)
17	Bidder capacity to supply pumps in one year. (Mention No. of pumps)
18	Outsourcing Item and Firm (Name & Address of Indian/ foreign Collaborator/s, if Any)
19	Own Testing facility
20	Skilled manpower
21	Dealer/ supply network in Rajasthan
22	Experience in Solar Pump Commissioning (<100 words)
23	Experience in other solar projects (<100 words)
24	Solar related Product Range
25	Guarantee, Maintenance & After Sales Services (Years)
26	Accreditation (Own Firm)
27	Accreditation (outsourcing Firm)
28	List of ISI, ISO, IEC, other cert. for own firm
29	List of ISI, ISO, other cert. for outsourcing firm
30	Technical specification for SPV cell/ panel/ module
31	Technical specification for motor pump sets
32	Technical specification for Junction boxes
33	Technical specification for Controller
34	Technical specification for Cables
35	Other Technical specification, if any
36	Details of D/C A/C pump configuration
37	Has any Govt. / Under - taking ever debarred the company / firm from executing any work ?
38	Special Remarks, if any

It is certified that the information provided above is true to the best of my knowledge and belief. If any information found to be concealed, suppressed or incorrect at later date, our tender shall be liable to be rejected and our company debarred from executing any business with RHDS.

Date :

Sign. & Stamp

5. Schedule-II

Form - 2: Outsourcing firms Information Sheet

Each member must fill in this form

Information	
Bidder's legal name	
Name of Lead Member	
Partners' / company name (attach extra sheets if more than one partner)	
Outsourcing/ company country of constitution	
Outsourcing/ company year of constitution	
Outsourcing/ company legal address in country of constitution	
Outsourcing/ company authorized representative information (Name, address, telephone numbers, fax numbers, e- mail address)	
Attached are copies of the necessary original documents. 1. 2. 3. 4.	

6. Schedule-III

Form FIN - 1: Financial Situation

Each Bidder must fill in this form including private/public limited company.

	Financial Data for Previous 3 Years [Rs. in Lacs]		
	2015-16	2014-15	2013-14
1. Total Assets			
2. Current Assets			
3. Total Liabilities			
4. Long Term Loans			
5. Current Liabilities*			
6. Profits Before Taxes			
7. Profits After Taxes			
8. Net Worth [1 - 4 - 5]			
9. Dedicated Revolving Line of Credit (as per format)		-	-
10. Available Working Capital [2 - 5] + [9]			
11. Return on Equity [6 / 8 of previous year]			
<p>❖ Attached are copies of the audited balance sheets, including all related notes, and income statements for the last three years, as indicated above, complying with the following conditions.</p> <ul style="list-style-type: none"> ▪ All such documents reflect the financial situation of the Bidder, and not sister or parent companies. <input type="checkbox"/> ▪ Historic financial statements must be audited by a certified accountant <input type="checkbox"/> ▪ Historic financial statements must be complete, including all notes to the financial statements. ▪ Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted). <input type="checkbox"/> ▪ As per International Accounting, Current Liabilities shall include loan and other repayments due within one year. <input type="checkbox"/> ▪ If the bidder feels that its financial capacity is insufficient it may include with the bid a letter from a reputed bank, addressed to the Member Secretary, RHDS, which describes the revolving line of credit that the bidders is eligible for with the bank. 			

Applicant

Auditor

7. Schedule IV

Form FIN - 2: Annual Turnover

Each Bidder must fill in this form including private/public limited company.

Annual Turnover Data for the Last 3 Years			
Year	Amount Currency	Exchange Rate	Rs in Lacs
2013-14			
2014-15			
2015-16			

The information supplied should be the Annual Turnover of the Bidder in terms of the amounts billed to clients for each year for work in progress or completed.

Signature of Applicant

Certified by Applicant's Auditor
(Affix Stamp)

8. Schedule V

Personnel

Bidders shall provide the names of suitably qualified key personnel who would be needed to successfully complete the project, in the following Form PER-1.

Data on the experience of each candidate should be supplied using the Resume format (Form PER-2) provided on the following page.

The proposed Mobilization/Deployment Schedule for all such key personnel shall be provided in the format provided in Form PER-3.

Form PER-1

1.	Title of position
	Name
2.	Title of position
	Name
3.	Title of position
	Name
4.	Title of position
	Name
5.	Title of position
	Name
6.	Title of position
	Name
7.	Title of position
	Name
8.	Title of position
	Name

13. Schedule VII b

Details of Solar Pump Models and configuration

S.No.	SPV Array Wp 3000/ 4800 /6750/9000 & Make	Proposed No of SPV modulels with Wp (minimum 200 Wp)	Type of Cell to be used	Pump Model & Make	Type of Pump (AC/ DC)/ (Surface/ Submersible)	Pump HP	Pump Dynamic Head (M)		Water Output (Ltrs./ day)	Discharge at Peak condition in ltrs per hours	Over all efficiency	Remarks
							... Meter to Meter	Shut off in Meter				
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												

Head v/s discharge details of every model of pump should be provided with this document. Water output figures are on a clear sunny day with three times tracking of SPV panel when solar radiation on horizontal surface is: 7.15 KWH/sq.m.

Department will conduct Pre-despatch Inspection of material & inspect the post installation efficiencies of system. Display of voltage, ampere & wattage on the controller will be preferred.

The information on Radiation v/s wattage of SPV Array, wattage v/s RPM of each pump models, RMP v/s discharge per minute on different dynamic head (10 metre to 75 metre) and discharge of water in litre per hour on different dynamic head at peak condition radiation available 7.15 KWH per sq. mtr. per day shall also be furnished as and when required.

(VI) Financial Bid

e-Tendering System Government of Rajasthan

Tender Inviting Authority : Rajasthan Horticulture Development Society Directorate of Horticulture,
Jaipur, Rajasthan.

Name of Work : Solar Water Pumping program 2017-18 for hi-tech Horticulture /Agriculture purposes
in the state of Rajasthan.

Contract No. DH/Solar/EOI/2017-18

SCHEDULE OF WORK / ITEM (S)

Sl. No	Description of Work / Item (S)	Item Code	Quantity	Units	Total price inclusive of all taxes (Rs.)	Total amount (Rs.)
1	SPV DC Surface Pumping System	3 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
2	SPV DC Surface Pumping System	5 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
3	SPV DC Surface Pumping System	7.5 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
4	SPV DC Surface Pumping System	10 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
5	SPV DC Submersible Pumping System	3 HP / 20 m head (minimum)/ Static mounting structure	1	Nos		
6	SPV DC Submersible Pumping System	5 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
7	SPV DC Submersible Pumping System	7.5 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
8	SPV DC Submersible Pumping System	10 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
9	SPV AC Surface Pumping System	3 HP / 20 m head (minimum)/ Static mounting structure	1	Nos		
10	SPV AC Surface Pumping System	5 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
11	SPV AC Surface Pumping System	7.5 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
12	SPV AC Surface Pumping System	10 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
13	SPV AC Submersible Pumping System	3 HP / 20 m head (minimum)/ Static mounting structure	1	Nos		
14	SPV AC Submersible Pumping System	5 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
15	SPV AC Submersible Pumping System	7.5 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
16	SPV AC Submersible Pumping System	10 HP/ 20 m head (minimum)/ Static mounting structure	1	Nos		
17	Additional cost for head	Additional cost of 50 m head over 20 m head	1	Nos		
18	Additional cost for head	Additional cost of 75 m head over 20 m head	1	Nos		
19	Additional cost for head	Additional cost of 100 m head over 20 m head	1	Nos		
20	Manual tracking System	Additional cost over Static mounting structure	1	Nos		
21	Single axis auto tracker system	Additional cost over Static mounting structure	1	Nos		
22	SPV Domestic lighting system	37 Wp/ 40 Ah Battery/ 9Wx2 fixture	1	Nos		
23	3 HP Solar pump system fencing around Solar Panels and Structure	Fencing as per technical specification*	1	Nos		
24	5 HP Solar pump system fencing around Solar Panels and Structure	Fencing as per technical specification*	1	Nos		
25	7.5 HP Solar pump system fencing around Solar Panels and Structure	Fencing as per technical specification*	1	Nos		
26	10 HP Solar pump system fencing around Solar Panels and Structure	Fencing as per technical specification*	1	Nos		

The Financial Bid shall be finalized on Turn-key basis by calculating the total amount quoted for the different materials and execution. A company shall be considered only if it quotes for all the materials and execution.

(VII) AGREEMENT (Indicative)

This Agreement made thisday of 2017 between Rajasthan Horticulture Development Society, Jaipur (hereinafter called the Employer) of the one part and of (hereinafter called the Contractor) of the other part.

Whereas the Employer is desirous that certain works should be executed by the Contractor, viz supply and Commissioning of Solar Pump Sets and has accepted a Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

Now this Agreement witnesseth as follows:

- 1 In this Agreement words and expressions shall have the same meaning as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) The Letter of Acceptance;
 - (b) The said Bid;
 - (c) The General Conditions of Contract;
 - (d) The Scope of Work;
 - (e) The Priced Bill of Quantities;
 - (f) The Schedules of Supplementary Information.
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of supply and commissioning of Solar Pumping system unit and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

In Witness whereof the parties hereto have caused this Agreement to be executed the day and year first before written.

The Common seal of _____ was hereunto affixed in the presence of:
or

Signed, Sealed and Delivered by the said _____ in the presence of:

Binding Signature of Employer

Binding Signature of Contractor

**(VIII) FORMAT FOR BID SECURITY BANK GUARANTEE (FOR EOI)
AND PERFORMANCE SECURITY BANK GUARANTEE
(PERFORMANCE OF EXECUTED WORK, UNCONDITIONAL)**

By a reputed International Bank or an Indian Scheduled Bank acceptable to RHDS

To:
Member Secretary,
Rajasthan Horticulture Development Society,
Pant Krishi Bhawan, Jaipur,
Rajasthan, India

Name of Contract: Supply and commissioning of SPV Solar Pumping Systems

WHEREAS[name and address of Contractor] (*hereinafter called the Contractor*) has undertaken, in pursuance of Contract No..... Dated..... for Supply and commissioning Solar Pumping system (*hereinafter called the Contract*)

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor (Name of the Contractor) shall furnish to you a Bank Guarantee by a recognized bank for the sum specified therein as security for performance of the work execution in case the system fails;

AND WHEREAS we have agreed to give the Contractor (Name of Contractor) such a Bank Guarantee.

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor (*Name of Contractor*), up to a total of Rs. [*Amount of Guarantee*][In words], such sum being payable in Indian Rupees in which the contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument any sum or sums within the limits of[*amount of Guarantee*] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

The guarantee shall be valid for 1 year (for security) or 5 years for maintenance after the date of supply and commissioning (in order to commitment of five years' free equipment maintenance of the SPV pumping system unit).

SIGNATURE AND SEAL OF THE GUARANTOR:

NAME OF BANK:

ADDRESS: