

# **Odisha Renewable Energy Development Agency**

## **Bid Document for Solar Water Pumping Program for Irrigation 2015-16**

**S-59, Mancheswar Industrial Estate, Bhubaneswar -751010**

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### **Disclaimer**

Kindly Note:

1. This document is not transferable
2. Though adequate care has been taken for preparation of this document, the bidder shall satisfy himself that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any bidder on the pre bid meeting or within ten days from the date of issue of the bid document, it shall be considered that bid document is complete in all respects and has been received by the bidder.
3. The Odisha Renewable Energy Development Agency (OREDA) reserves the right to modify, amend or supplement this bid document keeping in view the necessity in implementation of the scheme.
4. While the bid has been prepared in good faith, neither OREDA nor their employees or advisors make any representation, warranty, express or implied or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability and completeness of this bid document, even if any loss or damage is caused by any act or omission on their part.

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## DETAILS OF NOTICE INVITING TENDER

### Important Information:

<b>Date of hoisting of the bid document in OREDA website</b>	<b>24.9.2015</b>
<b>Date of pre-bid meeting</b>	<b>7.10.2015</b>
<b>Last date of submission of tenders and opening of technical bids</b>	<b>31.10.2015</b>
<b>Cost of tender document</b>	<b>Rs 10,500/-</b>
<b>Earnest Money Deposit</b>	<b>Rs 15,00,000/-</b>

Sealed tenders are invited from reputed manufacturers/ system integrators of Solar PV Water Pumping Systems having valid test certificates in the name of their own firms from MNRE accredited test centres under JnNSM for design, supply, installation, commissioning and maintenance for a period of 5 years of 2560 Nos of submersible Brushless DC Motor Pump Sets with 3 KW PV array and 3 HP motor ( MNRE-Model IV) for energising bore wells installed in farmers' fields throughout the state of Odisha.

Bid document for the above can be had from OREDA, S-3-59, Mancheswar Industrial Estate, Bhubaneswar-751010 on all working days up to **31.10.15** on payment of Rs. 10,500/- (Rupees ten thousand five hundred ) Payment can be made in cash at OREDA cash counter or through Account payee Demand Draft in favour of Chief Executive, OREDA Payable at Bhubaneswar.

Bid documents can also be downloaded from OREDA Website ([www.oredaodisha.com](http://www.oredaodisha.com)). In such case the cost of bid document in shape of Demand Draft drawn on any Nationalised Bank in favour of Chief Executive, OREDA payable at Bhubaneswar has to be kept in separate envelop superscribed "Cost of Bid Document" and kept in the main envelop for submitting bid document.

In case of purchase of bid document from OREDA cash counter the original money receipt issued by OREDA /demand draft has to be submitted along with the technical bid in a separate envelop .

Bids will be received up to 3.00 PM on **31.10.15** and **the technical bid will be opened on the same day at 3.30 P.M.** in presence of the bidders or their authorized representatives, if any.

## **1. Program Background:**

Under the “Solar Pumping Program for Irrigation” launched by MNRE, Gol Government of Odisha is desirous of energizing the bore wells installed in farmers’ field under the “Deep Bore Well SechaKaryakram”. Initially the program will be implemented in places where energisation through conventional means is found difficult.

Government Odisha has also decided to provide necessary financial support so as to make it affordable to small and marginal farmers. Such support can also be extended to other farmers/ farmers’ groups who have installed bore wells for irrigating their lands under different government programs being implemented by Agriculture Department, Horticulture Department, SCST Development Department, Forest Department, Watershed Mission etc.

To begin with it has been decided to support only Brushless DC solar PV motor pump sets with 3 KW array and 3 HP motors. Depending upon the performance and demand of the pumps higher capacity pumps in both DC and AC modes could also be supported under the program.

For procurement of the pumps and installation, commissioning and maintenance of the same in turnkey mode through the supplying firms this tender is being floated by OREDA, the State Nodal Agency with a view to bring in the top companies/firms in the country engaged in the business of manufacture/integration of solar PV pumps as per the technical requirements laid down by MNRE, Gol.

## 2. Scope of Work

The broad scope of the work includes supply, installation, commissioning, testing, handing over and maintenance (for 5 years) of 3 KW DC solar PV pumps as per technical specifications provided in this tender document. The pumps will be installed across the state in the bore-wells of identified farmers. The specific actions under these scopes are

- a. Collection of the list of farmers and their addresses from OREDA or its authorized offices/persons.
- b. Collection of water discharge reports of the designated bore wells from OREDA or its authorized offices/ persons.
- c. Visit the farmers and identify the designated bore well.
- d. Locate an ideal space for installation of the PV array, control equipment etc. in consultation with the farmer. Before doing so the farmer has to be made aware of the details of the scheme and its different aspects.
- e. Obtaining clearance of the farmer (in the given format) for installation of the pump in a mutually decided location under the possession of the farmer.
- f. Finalization of the probable date of installation in consultation with the farmer.
- g. Transportation of the pumping system along with all its components/ subcomponents to the village concerned and if required storing the same in a safe place within the village in consultation with the farmer. OREDA shall not be the consignee to receive the materials supplied/ delivered.
- h. Installation of the solar PV array, pump, control equipment etc. in the presence of the farmer. During installation the farmer must be introduced to the various components and sub components of the system and should be given tips about their maintenance, upkeep, safety etc.
- i. After installation, the operation of the pump must be demonstrated to the farmer and she/he should be adequately trained in the operation, maintenance and upkeep of the pump.
- j. On completion of training the pump should be handed over to the concerned farmers in the presence of the authorized representative of OREDA, authorized representative of the sponsoring government department, VAW and such other persons who may be available in the village.
- k. Collection of all documents, including GPS tagged photograph showing the PV array, water discharge from the pump and the farmer in the inset.
- l. Installation of a sign board (preferably made of aluminum sheet) under the PV array on which the name of the farmer, date of installation of the pump, name of the supplying firm, name of the person responsible for installation, telephone number of the service centre/ toll free number for service enquiries and all other relevant information must be written legibly in Odiya language only.

- m. Following commissioning of the project, submission of all documents as detailed in the tender document including the joint Commissioning report to OREDA to facilitate payment.
- n. Periodic maintenance of the system as detailed in this tender.
- o. Opening of service centre/keeping servicing personnel and making available all essential spares in the vicinity of the solar water pumping system.
- p. Submission of periodic reports and returns as per the MIS prescribed by OREDA from time to time.
- q. Coverage, Comprehensive Maintenance for 5 years.
- r. Performance guarantees for the rated delivery / discharge of water as per standard test condition.
- s. Getting the drawing of the module mounting structure with double axis manual tracking arrangement approved by OREDA before commencement of work.
- t. While cabling the array care must be taken such that no loose / open cables lie anywhere related to the supply / installations.

## 2. Eligibility Criteria

In order to be eligible to participate in the tender, the bidder must fulfill the following eligibility criteria. Any discrepancy or deviation from the same shall make the bidder ineligible for participating in the tender

- a) The bidder must be a company registered under the Indian Companies Act 1956 or a firm registered under VAT / CST.
- b) The bidding company/firm must be a manufacturer of either solar panels of capacities 250 watt and above or of solar PV pumps of 3 KW capacity or an integrator of solar pumping system required under this tender. In either case the bidding firm/company must be having a valid test report of the pump being integrated by it in the name of the company/firm.
- c) The bidding company/firm must have been rated by any of the approved rating agencies of MNRE like ICRA, CRISIL etc for SPV systems and must be holding necessary certificate to that effect.
- d) The bidding company/firm must have a minimum cumulative turnover of Rs 10 (ten) Crores over last three years exclusively in the business of solar PV. As proof of the same a certificate to the effect duly signed and stamped by a registered chartered accountant in the letter head of the CA's firm must be included in the tender document.
- e) The bidding company/ firm must have valid VAT / STCC clearance certificate from appropriate authorities. Before issue of work order the vendor must register its firm under Odisha sales tax and submit necessary proof in support of the same.
- f) The bidding company/firm must have the capacity to design, manufacture/ integrate and test at least 500 solar PV water pumping systems per annum (documentary evidence in support of the same such as valid certificate mentioning production capacity from NSIC, DIC should be furnished).
- g) The bidding company/firm must have got its solar water pumping system ( BLDC/ 3 KW array 3 HP Motor) tested in any of the authorized test centers of MNRE, GOI and possess valid test certificates against the same in the name of the company/firm (documentary evidence in support should be furnished).



- h) The solar PV water pumping systems including all its components and sub- components must be in compliance to the relevant MNRE technical specification.
- i) The bidder's company/ firm must have installed minimum 100 Nos. of solar PV pumps for irrigation/drinking water supply or 200 solar PV pumps for irrigation and drinking water supply put together or received work orders from any government department/agency of any state in India for supply, installation and commissioning of atleast 500 solar pumps and must have executed at least 100 out of the same. In case of execution of projects performance reports from appropriate government authorities must be submitted along with the bid document.
- j) The bidder's company/firm must have established quality assurance system and organization in line with the requirements under the tender.
- k) Following award of work the bidder's company/firm must be open cluster level service centres adequately equipped with technical personnel, spares, tools and tackles etc. to provide proper maintenance services to the installed systems. The service centres must be established prior to commencement of work.
- l) The firm must not have been debarred / blacklisted / defaulted by any Govt. Dept, agency, PSUs / institution / agencies / autonomous organizations. As proof of the same the bidder shall submit duly notarized a self-certificate by an authorized person of the bidder's company/firm.
- m) The bidder shall not assign or transfer sub-contract to the supply / installation orders given by any government/ PSU/ agency except in case of government organization having associates experienced in Solar pump business in the state of Odisha only.
- n) The bidder's firm/ agency shall submit an affidavit towards the submission of above documents in support of authenticity of documents.

### 3. INSTRUCTIONS TO BIDDERS

**Intending bidders are requested to carefully study the instructions contained hereunder before preparing their bid documents for submission.**

- a. A Bidder shall submit a single offer-bid only.
- b. Bidders must submit their bids for all items as stated in this bid document above in a **single hard bound book form** properly page numbered and Indexed. **No loose or separate papers or spiral bound documents will be accepted. Submission of loose papers or spiral bound documents shall lead to the rejection of the same.**
- c. Demand Drafts towards cost of document and EMD should be submitted in a separate envelop placed inside the envelope containing the technical bid.
- d. Bids must be submitted in English language only.
- e. Incomplete, telegraphic or conditional bids shall not be accepted.
- f. Prices quoted must be firm and fixed. No price variation / escalation shall be allowed during process of completion of the project or for a period of one financial year whichever is earlier.
- g. The bidders must sign at the bottom of each page of the bid documents at the time of submission in token of unconditional acceptance of the departmental terms and conditions, technical specifications etc.
- h. Valid TIN / VAT / CST / e-filing submission document duly attested must be submitted along with the bid. **All rules and circulars of Finance Department, Govt of Odisha issued from time to time will be applicable during project period from issue of tender to the completion of 5 years CMC period.**
- i. Deviations in terms and conditions, Specification of material, Inspection clause etc. will not be accepted under any condition.
- j. The bidders should furnish the information on all past supplies and satisfactory performance.

- k. The bidder shall submit copies of documents defining the constitution or legal status, place of registration and principle place of business of company or firm or partnership.
- l. The bidder shall furnish a brief write up backed with adequate data, explaining capacity and experience (both technical and commercial) for the manufacture and supply of the required systems, equipments within the specified time of completion after meeting all their commitments.
- m. The bidders shall submit reports on the financial standing of its company/firm such as audited profit and loss statements, balance sheets and auditor's reports, bankers' certificates etc. All accounting statements submitted should be duly audited and with proper auditor's note on accounts and accounting standards.
- n. Earnest money as specified in bid may be deposited in cash at OREDA cash counter or in shape of Demand Draft drawn in favour of Chief Executive, OREDA payable at Bhubaneswar from any nationalized bank. Bids without E.M.D will not be accepted unless exempt.
- o. Bids received **late due to postal delay** or otherwise **will not be considered**.
- p. The bidders are required to furnish their offers in the price bid both in words & figures neatly computer typed. Any correction shall liable the document to be rejected. In case of any conflict between figures and words, the latter shall prevail.
- q. Since timely execution of supply / installations is of paramount importance, requests for extension of time shall not be ordinarily entertained.
- r. Canvassing in any manner shall not be entertained and will be viewed seriously leading to rejection of the bid.
- s. Certificate to the effect that the systems to be supplied are indigenous & not fully imported must be furnished.
- t. Power of attorney to sign the agreement on behalf of bidders & partnership deed articles, if any, should be enclosed along with original bid documents.
- u. Notice inviting Tender, bid documents, prescribed Technical bid, price bid, terms & conditions will form the part of the tender.
- v. All pages of the bid documents must be signed & sealed by the authorized person on behalf of the bidders.
- w. Bids will be accepted & will be opened as per information mentioned in the notice-inviting tender. No receipt against submission of bid shall be issued by OREDA.

- .
- x. The last date of receipt of the bid is 31.10.15 up to 3.00 PM. Sealed tenders shall only be dropped in the specified tender box kept in the conference hall of OREDA during office hours on working days. Bids received after due date & time will not be considered. The bids of such firms shall only be considered who have purchased the bid documents from the Agency by depositing the prescribed fee of the bid document (Non refundable) / downloaded from the website and submitted along with cost of the tender paper in shape of cash / DD drawn in favour of Chief Executive OREDA from any nationalized bank. If due to any reason the due date is declared as a holiday the bid will be opened on next working day at the same time.
- y. The technical bid shall be opened on 31.10.15 at 3.30 PM in the OREDA office, Bhubaneswar in presence of such bidders or their authorized representatives, who may like to be present at the time of opening.
- z. In case of supply of any defective material or substandard material, the materials will be rejected & it will be the responsibility of the supplier for taking back & replacing the rejected materials at their own cost. In case of non-lifting of such rejected materials within a reasonable time offered by the office it will have the right to suitably dispose of the same and forfeit the amount.
- aa. The supplied materials should strictly comply with the specifications as mentioned in the bid; otherwise the material would be liable for rejection. The valid test report on components issued by the accredited test centres of MNRE, GOI are to be submitted.
- bb. Any clarification on the technical specification and commercial terms and conditions may be clarified in writing from OREDA.
- cc. Deviation of any commercial terms and condition and technical specification shall not be entertained under any circumstances
- dd. OREDA will not be responsible for any incidental or consequential losses of the firms while execution and till expiry of the period of maintenance.
- ee. All the bidders shall essentially indicate the break-up of prices as shown in Price bid.
- ff. During the warranty period, MNRE/ State Agencies/ Users reserve the right to cross check the performance of the systems with the minimum performance levels specified in the MNRE specifications.

- gg. The Chief Executive, OREDA shall award the contract to the successful bidders whose bids shall be qualified after evaluation in terms of the responsiveness and lowest standardized rate determined on the basis price bids
- hh. If qualified, the bidder must open a local office at Bhubaneswar before commencement of works and a service centres fully equipped with technical person and spare parts at cluster level in the district where solar pumps installed. Such facility must have proper mailing address with contact person detail from time to time for all documents. **All supply / installation orders shall be placed with the state local registered office of the qualified empanelled bidders having valid Odisha TIN/ OVAT as per the FD circular no 5439 dtd 25.2.14.**
- ii. On award of contract the qualified bidder shall be termed as executing agency.

**Submission of bids:**

All documents concerning the bid, including forwarding letter should be submitted in a in a properly sealed large main envelop superscribed

**“Bid for Solar Water Pumping Program for Irrigation 2015-16”**

**DNIT No**

**Dated**

and addressed to :

**Chief Executive**

**OREDA**

**S-59, Mancheswar Industrial Estate**

**Bhubaneswar- 751010**

The main envelop should contain two separate smaller envelops superscribed **“Technical bid”** & **“Financial bid”** respectively.

**a. Contents of the technical bid:**

- i. Technical bid as Annexure A of the bid document
- ii. Earnest Money in shape of Bank draft
- iii. Cost of document in shape of bank draft if the document is down loaded.
- iv. Copy of OREDA money receipt if the document is purchased from OREDA.
- v. Valid VAT / Sales tax clearance certificate
- vi. balance sheets and profit & loss accounts for last three years

- vii. organizational profile
- viii. Technical Specification
- ix. Indigenity Certificate
- x. Copy of the bid document duly signed on all pages by authorized signatory.
- xi. Brochures/ literatures
- xii. Any other documents as may be mentioned in the bid document excepting financial bid.

**b. Contents of the Financial bid**

**i. Financial bid only in format**

**( any other document like cost of bid document, draft for earnest money, any conditionality for the quoted price etc. if found in the financial bid envelop the entire bid shall be liable for rejection.**

**Opening of the bids:**

The procedure of opening of the bid shall be as under

- i) The "**Main Envelope**" and Envelope containing the "**Technical Bid**" shall be opened at the time & date mentioned in the bid notice in the presence of bidders, who choose to be present or their authorized representatives.
- ii) After evaluation of the technical bids and shortlisting of vendors by the designated committee of OREDA intimations will go to short-listed vendors only for opening of the financial bids.
- iii) During evaluation of the technical bids, if such necessity arises, the bidders may also be called for making presentation on their technical offers.
- iv) The financial bids shall be opened as per the specified schedule in the presence of bidders, who choose to be present or their authorized representatives.

**Acceptance/ Rejection of the bid documents:**

Chief Executive, OREDA reserves the right to reject or accept any bid or annul the bidding process at any time prior to award of contract, without having prejudice of incurring any liability to the affected bidders or any obligation to inform the bidders.

**Chief Executive**

I/we have carefully read & understood the above terms & conditions of the bid & agree to abide by them.

**Signature of Bidder with Seal**

#### 4. COMMERCIAL TERMS & CONDITIONS

##### 4.1 Rate:

The offer should indicate the unit cost of the system, Installation & Commissioning charges, CMC Charges and taxes & duties separately (Annexure I, J,K,). The unit cost must be inclusive of packing, forwarding, loading & unloading charges, cost of insurance(transit as well as post installation for 5 years) and transportation FOR destinationsthroughout entire state where the system will be installed as per the order.

##### 4.2 Tax & Duties etc.:

All taxes and duties as admissible will be deducted from each bill and certificate for such deduction will be issued.

##### 4.3. Earnest Money Deposit:

4.3.1 Earnest money deposit Rs.15.00 (fifteen) lakh as specified in the Table above is required to be deposited along with the bid without which the bid will not be accepted. No interest will be payable on the EMD amount under any circumstances.

4.3.2 Earnest money shall be submitted in shape of a Demand Draft in favour of Chief Executive, OREDA from any Nationalised Bank Payable at Bhubaneswar and the proof of deposits should be attached to the bid. E.M.D would be refunded to the unsuccessful Bidders after finalization of the bid without any interest.

4.3.3 E. M. D would be forfeited in case of non- compliance of the purchase order by the successful bidders. **EMD submitted shall be returned to successful bidders only after Security cum Performance Bank Guarantee against the entire allotment is deposited.**

4.3.4 In case of claim for exemption from deposit of Earnest money sufficient proof in support of claim for exemption of EMD as prescribed in Govt. of India Notification is to be attached with the bid.

##### 4.4 Security Deposit/ Performance Guarantee Fees:

The successful bidders must deposit **Two numbers of bank guarantees** (Annexure-H) towards Security cum Performance Guarantee fees with the Chief Executive, OREDA, Bhubaneswar along with bills, challans and all other documents as per payment clause before processing of payment as follows

- i) 5 % of the ordered value in shape of irrevocable Bank Guarantees with **5½ years validity** from the date of supply, installation and commissioning till the completion of respective warranty and CMC period of the composite system.



- ii) 5 % of the ordered value in shape of irrevocable Bank Guarantees with **10½ years validity** from the date of supply, installation and commissioning till the completion of respective warranty period of the module.

**Refund / forfeiture of security deposit/performance Bank Guarantee**

The said deposit would be forfeited in the following cases

- a. if the systems are not installed and commissioned as per given schedules.
- b. If the systems are not properly maintained and the performance of the systems do not meet the standards mentioned in the work orders.

The first security deposit amount will be refunded after the expiry of the Warranty period and CMC period of the systems i.e 5 years after commissioning of each system, subject to satisfactory execution / performance of the systems.

The 2<sup>nd</sup> PBG will be refunded after the expiry of 10 years i.e module performance guarantee after successful performances.

**4.5 Work Execution Schedule:**

The work shall be executed only after receipt of the certified farmers' list from OREDA. Under normal circumstances a given work order must be fully accomplished within 180 days of receipt of the work order as well as the certified farmers' list.

In case of site problems that are beyond the control of the vendor and are likely to delay the execution the same must be promptly brought to the notice of OREDA and time extension/ alternate site may be sought failing which penalty clauses under this tender shall be applied against the delayed work.

Execution of work shall be carried out in an approved manner as outlined in the technical specification or where not outlined, in accordance with the relevant Indian Standard Specification, to the reasonable satisfaction of the Authorized OREDA Officer.

Upon intimation about commissioning of the systems by the vendor a joint inspection will be carried out by OREDA, representative of the sponsoring Govt. department/agency and the vendor.

After such inspection a Joint Commissioning Report (JCR) shall be taken out with signatures of all above officers as well as the concerned farmer which shall form a major document for release of payment.

**4.6 Validity of offer:**

The price bid offer (Annexure I,J,K) must be kept valid for a period of one year from the date of opening of the technical bid. No escalation clause except the admissible tax component under the period of consideration would be accepted.

**4.7 Tax return:**

The bidders must submit attested copy of valid up to date CST / VAT clearance / e-filing submission certificate along with the bid. The bid would not be considered without this document.

The original certificate would be produced at the time of opening of the bid, or, before issue of purchase order, if required.

**4.8 Warranty:**

The Supplier warrants that the Goods(as per the test report issued by authorized test centre) supplied under this Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or is required by the Purchaser's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in conditions prevailing in the country of final destination.

This warranty shall remain valid for 60(sixty) months after the Goods or any portion thereof as the case may be, have been delivered to and commissioned and accepted at the final destination indicated in the Contract.

The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall repair or replace the defective Goods or parts thereof, without cost to the Purchaser other than, where applicable, the cost of inland delivery of the repaired or replaced Goods or parts from the port of entry to the final destination.

If the Supplier, having been notified, fails to remedy the defect(s), the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

**4.9 Penalty and termination of contract:**

The systems shall be supplied, installed and commissioned within the scheduled time as mentioned in the supply / installation order. If the supplier fails to adhere to the

schedule, OREDA shall without prejudice to its other remedies under the contract deduct from the contract price as liquidated damages a sum equivalent to 1% of the delivery price of the delayed goods or unperformed services for each week of delay until actual delivery or installation/commissioning up to a maximum deduction of 5% of the contract price for delayed goods or installation and commissioning. Once the maximum is reached (i.e 5 weeks of delay) OREDA may consider termination of the contract and forfeit the security deposit without prejudice to the other remedies of the contract.

If at any time during the performance of the Contract the supplier should encounter conditions impeding timely delivery of the Goods and performance of the Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the OREDA shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.

A delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of liquidated damages pursuant, unless an extension of time is agreed upon without the application of liquidated damages.

#### **4.10 Termination for Default**

The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or in part:

- 4.10.1 if the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser; or
- 4.10.2 if the Supplier fails to perform any other obligation(s) under the Contract.
- 4.10.3 If the supplier, in the judgment of OREDA has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

For the purpose of this clause:

“Corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution or a contract to the detriment of the borrower, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the borrower of the benefits of free and open competition.

In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

#### **4.11 Inspection:**

Pre delivery inspection of major components may be carried out by a team of designated officials of OREDA, any other department as may be considered appropriate at the factory site of the vendor / manufacturer. Before despatch of consignment intimation shall be given sufficiently ahead so that no delay occurs for deputing officials and inspection at the premises / test site.

4.11.1 The rest of the tests and inspections shall be made at the place of delivery. Officers authorized by OREDA shall be entitled at all reasonable time to inspect and supervise and test during erection and commissioning. Such inspection will not relieve the executing firm of their obligation in the contract. The water output as per technical specification has to be guaranteed without any controversies of variation of water table.

4.11.2 OREDA shall have the right to have the tests carried out at its own cost by an independent agency at any point of time.

#### **4.12 Payment:**

Payment will be made in installment of minimum 10 (ten) solar water pumping system installed out of the total supply / installation order issued against the respective executant in the following manner

- i)** **90%** of the total value of systems with full taxes / duties (excluding CMC charges) will be made after commissioning of the project. The check list of documents to be submitted along with the bills and Security cum Performance Bank Guarantee for release will be as per the purchase order issued.

For processing of the payment the indicative documents are to be submitted like (Annexure-B,C,D,E,F) all technical detail of the installed system, inspection and testing report, GPS tagged photograph of the solar PV array, pump with the farmer in the inset, handing over report, Warranty certificate, Joint commissioning certificate.

- ii)** Balance **10%** of the systems and other order value (excluding CMC charges) will be released after 3 months of successful functioning of the system subject to submission of power consumption/flow data and other relevant deliverables recorded on the digital data logger installed in the controller of the system and

submission of all documents (report of completion training and signing of CMC effective from the date of total commissioning of systems of the supply / installation order) as given in the purchase order.

- iii) At the time of submission of bills NDC as per OVAT rule needs to be submitted by the vendor, In case of non submission, TDS (OVAT) @ 4% shall be deducted from the billed amount and deposited with the appropriate tax authorities.

#### 4.13 Allocation of supply / installation & Execution:

**All supply / installation orders shall be placed with the state local registered office of the qualified empanelled bidders having valid Odisha TIN/ OVAT as per the FD circular no 5439 dtd 25.2.14.**

In view of large geographical spread and expeditious completion of the project, it is imperative that there shall be multiple vendors subject to their acceptance to the L1 price discovered in the tender.

OREDA shall distribute the initial 30% of total quantity of work in hand amongst those successful bidders who submit their acceptance to L1 price.

Depending upon the performance of the vendors with regards to quality of execution and timely completion of the allotted projects, subsequent allocations shall be considered in batches.

If L1 bidder continues to perform as per the stipulations under this tender care will be taken to give them at least 30% of the total order.

The allotment of the area / districts will be the discretion of the OREDA authority. However, while allocating the work / care will be taken to allot contiguous patches to bidders so that subsequent maintenance etc will be easier.

#### 4.14 Comprehensive Maintenance Contract:

CMC will be applicable during the period of the warranty period of 5 years. The bidder must enter into a Comprehensive maintenance contract for the specified period at the time of execution of the order. Offer without such CMC shall not be considered (sample format of CMC enclosed at Annexure). The scope of CMC must cover supply of all spare parts, services and performance reports during the contract in force. Order shall be placed on bidders who agree to offer such CMC. The CMC charges quoted by the bidder must be realistic in view of actual rendering of after sale services. The payment of annual maintenance charges under the Comprehensive Maintenance Contract shall depend upon the functionality of the system duly certified by the concerned authorized officials of OREDA/ submission of power consumption, flow data and other relevant

deliverables recorded on the digital data logger installed in the controller of the system. Upon receipt of such certificates CMC amount as applicable shall be paid at the end of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> years.

**4.15 Limitation of Liability:**

OREDA, will, in no case be responsible for any accident fatal or non-fatal, caused to any worker or outsider in course of transport or execution of supply / installation. All safety measures as per prevailing norms should be adopted. All the expenditure including treatment or compensation will be entirely borne by the Executants. The Executants shall also be responsible for any claims of the workers including PF, Gratuity, ESI & other legal obligations. The executants shall take all steps towards the security compliances.

**4.16 Force Majeure:**

In no event shall either Party have any liability for failure to comply with this Agreement, if such failure results directly from the occurrence of any contingency beyond the reasonable control of the Party, including, without limitation, strike or other labor disturbance, riot, major power failure, war, natural calamities including but not limited to floods, earthquakes, fire, volcanic eruptions, epidemics, National Emergency, interference by any government or governmental agency, embargo, seizure, or enactment or abolition of any law, statute, ordinance, rule, or regulation (each a " Force Majeure Event"). In the event that either Party is unable to perform any of its obligations under this Agreement because of a Force Majeure Event, the Party who has been so affected shall as soon as may be, after coming to know of the Force Majeure Event, inform the other Party and shall take reasonable steps to resume performance as soon as may be after the cessation of the Force Majeure Event. If the period of nonperformance due to a Force Majeure Event exceeds thirty (30) days, the Party whose ability to perform has been so affected may, by giving written notice, terminate this Agreement.

**4.17 Dispute:**

For adjudication of any dispute between OREDA and the bidders arising in this case, reference can be made to any Law courts under the jurisdiction of Odisha High court only. The Chief Executive, OREDA reserves the right to accept or reject any or all bids without assigning any reason thereof.

**Chief Executive**

I/We have carefully read and understood the above terms and conditions of the bid and agree to abide by them.

**Signature of the bidder with**

Seal

## **Specifications of the proposed models of SPV pump for irrigation**

### **1. Standards/Quality:**

#### **A. PV ARRAY**

The SPV water pumping system for irrigation proposed under this tender should be operated with a PV array of 3000 Watts peak capacity measured under Standard Test Conditions (STC). Modules having capacity above 200Wp should only be provided in the array to obtain the required array power output. Indigenously produced PV module (s) containing mono/ multi crystalline silicon solar cells should only be used.

- Modules supplied with the SPV water pumping systems should have certificate as per IEC 61215 specifications or equivalent National or International/ Standards.
- Modules must qualify to IEC 61730 Part I and II for safety qualification testing.
- The efficiency of the PV modules should be minimum 14% and fill factor should be more than 70%.
- The terminal box on the module should have a provision for “Opening” for replacing the cable, if required.

#### **B. MOUNTING STRUCTURES AND TRACKING SYSTEM**

- The PV modules should be mounted on one or two metallic structures consisting of a sturdy steel mast with a pedestal of appropriate strength that can be grouted into a concrete foundation and a steel framework of adequate strength

to fasten the modules. The structure should be appropriately designed to withstand high wind velocities up to 200 km per hour.

**(The bidder is required to submit a certificate from an authorized chartered engineer with regards to the strength and durability of the structure)**

- All steel members of the structure including the pole, base plate, braces etc. should be hot dip galvanized with minimum 80 micron thickness.
- Only anti-theft fasteners should be used in the mounting structure.
- To enhance the performance of SPV water pumping systems, manual or passive tracking system must be used with arrangement for seasonal tilt angle adjustment and three times manual tracking in a day should be provided.
- Since security of solar panels is a major concern it is required to design the pole and structure in such a way so that the chances of theft can be minimized.

**(the bidder is required to provide a detailed note on their proposed arrangements for minimizing the chances theft)**

### **C. MOTOR PUMP-SET**

The SPV water pumping systems should use only DCBL submersible motor pump set only with due approval from Test Centres of the Ministry. Solar Pumps should have the following features:

- The pump should be provided with specially developed mechanical seals so as to ensure zero leakage.
- The suction and delivery head will depend on the site specific condition of the field.
- The suction/ delivery pipe (GI/HDPE – 63 mm), electric cables (4sqmm), civil work and other fittings required to install the system.
- The following details should be marked indelibly on the motor pump set
  - a) Name of the Manufacturer or Distinctive Logo,
  - b) Model Number and serial Number.



#### **D. ELECTRONICS AND PROTECTIONS**

- Maximum Power Point Tracker (MPPT) should be included to optimally use the Solar panel and maximize the water discharge.
- 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.
- Most parts of Odisha being prone to lightning adequate protection must be given against the same by providing appropriate lightening arrester, Surge Protection Devices etc.

#### **E. ON/OFF SWITCH**

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

- The controller must have IP 54 protection or must be housed in a cabinet having at least IP 54 protection.
- 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.

#### **OPERATION AND MAINTENANCE MANUAL**

An Operation and Maintenance Manual in Odiya language, should be provided with the solar PV pumping system. The Manual should have information about solar energy,

photovoltaic, modules, DC motor pump set, tracking system, mounting structures, electronics and switches.

It should also have clear instructions about mounting of PV module, DO's and DONT's and on regular maintenance and Trouble Shooting of the pumping system. Name and address of the person or Centre to be contacted in case of failure or complaint should also be provided. A warranty card for the modules and the motor pump set should also be provided to the beneficiary.

**Head Vrs Discharge:**

**The discharge of the pumps should not be less than 63,000 litres per day from a total head of 50 mtres the Shut Off Dynamic Head being 75 meters 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).**

**Check list of documents to be submitted along with the bid**

Sl no	Particulars	Complied	Page-no / Flag
1	Bank draft for Rs.10,500/- or original money receipt issued by OREDA as proof of purchase of tender paper or exempt as admissible with proof	Bank No Dt	Envelope
2	Bank draft for Rs.15,00,000/- towards Earnest Money Deposit or exempt as admissible with proof.	Bank No Dt	Envelope
3	Forwarding letter duly signed and stamped by the bidder		
4	Undertaking duly signed and stamped by the bidder.		
5	Document stating the status of the bidder as manufacturer /systems integrator		
6	Copy of the PAN card of the bidder's firm		
7	Copy of the TIN card of the bidder's firm		
8	Copies of Tax returns, VAT/ e-filing		
9	Document stating annual turnover in solar business duly signed and stamped by a registered chartered accountant on the letter head of the chartered accountant		
	Annual audited balance sheets for 2012-13		
	Annual audited balance sheet for 2013-14		
	Annual audited balance sheet for 2014-15		

10	<p>Proof of installation of minimum 100 Nos. of solar PV pumps for irrigation/drinking water supply or 200 solar PV pumps for irrigation and drinking water supply put together or receipt of work orders from any government department/agency of any state in India for supply, installation and commissioning of atleast 500 solar pumps and execution of at least 100 out of the same.</p> <p>(Copies of work orders as well as [performance certificates given by the respective organizations may be enclosed )</p>		
11	Proof of Production capacity of solar PV water pumping system.		
12	Original Board resolution to undertake the work under the jurisdiction of the local office, if qualified		
13	Proof of establishment of Quality assurance systems and organisation		
14	Valid Test report of solar PV module from MNRE authorised test centres showing compliance to IEC 61215 & IEC 61730		
15	Valid Test reports of Solar PV water pumping systems with 3 KW PV array, 3 HP DCBL motor-pump set		
16	Willingness to open service centre in the state of Odisha and Local registered office for total execution		
17	Undertaking for Indigenous of the supplied items		
18	All accounting statements with auditor's note		

19	Undertaking to unconditionally accept all terms and conditions of the bid document with copy of Board Resolution		
20	Power of attorney to sign the agreement on behalf of bidders & partnership deed articles, if any.		
21	Filled in bid document duly signed and stamped at the bottom of each page except the price bid format.		
22	Organizational profile containing the original documents defining the constitution or legal status, place of registration.		
23	Signed Technical bid in sealed envelope		
24	Price bid in separate single sealed envelope and no other content		

**Forwarding Letter**  
**(to be submitted in the letter head of the bidder)**

To,

The Chief Executive  
Odisha Renewable Energy Development Agency (OREDA)  
S.59. MIE, Bhubaneswar -751010  
Odisha

Subject: Submission of tender for Supply, Installation, testing , Commissioning & Maintenance gfor 5 years of **Solar water pumping systems for irrigation** vide tender call **Notice No. 2055/ OREDA, dtd -24.09.2015**

Sir,

Having studied the Tender document carefully I/we, the undersigned, offer to submit our tender for the supply / installation of Design, Manufacturing, Testing, Supply, Installation, Commissioning & Maintenance for **Solar water pumping systems for irrigation** in conformity of the tender document.

I/We have also read the various provisions of the Tender and confirm that the same are acceptable to us including the provision of CMC. We further declare that any additional conditions, variations, deviations, if any, found in our Tender offer shall not be given effect to. We further understand that **any deficiency / illegibility in documents shall make our tender liable for rejection.**

I/we submit our tender understanding fully well that

- (a) The bid and other documents submitted along with the same will be subject to verification by appropriate authorities.
- (b) OREDA reserves the right to accept or reject any application or the bid process itself without assigning nay reasons thereof and shall not be held liable for any such action.
- (c) Any genuine changes made by OREDA in the interest of the supply / installation with respect to the technical requirement during the course of project implementation will be acceptable.
- (d) All acts, rules, regulations, norms and conditions of Govt of India and Govt of Odisha shall be applicable during the process of tender and during the period of execution of project including CMC period.

We hereby declare that all the information and statements made in this proposal are complete, true and correct and also accept that any misinterpretation contained in it may lead to our disqualification.

We hereby declare that our Tender is made in good faith and the information contained is true and correct to the best of our knowledge and belief.

**Yours faithfully,**

**Signature of bidder**

### UNDERTAKING BY THE BIDDER

I/we here by undertake that

1. We have thoroughly read and examined the notice inviting tender and the tender document along with all its schedules, annexure etc.
2. The rates quoted by us are firm and final and are meant for execution of the allotted supply / installation within the time frame stipulated in the tender/supply / installation order.
3. All terms and conditions of the tender including the rates quoted by us shall remain valid for a period of one year from the date of opening of the technical bids.
4. In case our tender is incomplete in any respect or we violate any of the prescriptions given in the tender for submission of the same OREDA shall , without prejudice to any other right or remedy , be at liberty to forfeit the earnest money deposited by us.
5. In case of award of supply / installation in our favour OREDA shall have the right to convert the EMD deposited by us in to full or part (as the case may be) of the security deposit to be deposited by us against award of work order..
6. In case we fail to commission the allotted numbers of pumps as per the time schedules given by OREDA or fail to fulfill any of the terms and conditions given in the tender OREDA shall , without prejudice to any other right or remedy , be at liberty to forfeit the above security deposit made by us against award of work order..
7. I/We hereby declare that I/We shall treat the tender documents, specifications and other records connected with the supply / installation as secret/confidential and shall not communicate information derived there-from to any person other than a person to whom I/We have authorized to communicate the same or use the information in any manner prejudiced to the safety of OREDA/the State Govt.
8. I/We shall abide by all the laws prevailing at the time of the execution of the supply / installation and shall be responsible for making payments of all the taxes, duties, levies and other Govt. dues etc. to the appropriate Govt. departments.
9. Our state commercial tax / TIN registration no. is \_\_\_\_\_  
and  
CST registration No.

---



The PAN No. under the Income Tax Act is \_\_\_\_\_ and  
Service Tax Registration No. is \_\_\_\_\_

10. I/We shall be responsible for the payment of the respective taxes to the appropriate authorities and should I/we fail to do so, I/we hereby authorize OREDA to recover the taxes due from us and deposit the same with the appropriate authorities on their demand.

**Signature of bidder with**

**stamp**

**Dated:**

**Letter of Authorization**

**(to be submitted in the letter head of the bidder)**

To,  
Chief Executive  
Odisha Renewable Energy Development Agency  
S-59, MIE, Bhubaneswar-751010  
Odisha

Sub: Submission of tender for Supply, Installation, testing , Commissioning & Maintenance gfor  
5 years of **Solar water pumping systems for irrigation** vide tender call **Notice  
No. 2055/ OREDA, dtd -24.09.2015**

Sir,

I/we hereby authorise Ms. /Mr. \_\_\_\_\_ , Designation  
.....of our company to sign all relevant documents on behalf of the  
company/firm in dealing with the above tender. She / He is also authorized to attend all  
meetings and submit technical and commercial information as may be required by OREDA in  
the course of processing of the tender.

We further authorise Ms. /Mr. \_\_\_\_\_ designation..... of our  
company to make technical presentation on behalf of the company.

Signature of the authorise persons

1. \_\_\_\_\_
2. ....

Signature attested

Nme and designation of the attesting officer with stamp.

**Yours faithfully**

**Head of the organization**

**DECLARATION**

**(to be submitted on the letter head of the company)**

To,

Chief Executive  
Odisha Renewable Energy Development Agency  
S-59, MIE, Bhubaneswar 751 010.  
Odisha

Sub: Submission of tender for Supply, Installation, testing , Commissioning & Maintenance gfor 5 years of **Solar water pumping systems for irrigation** vide tender call **Notice No. 2055/ OREDA, dtd -24.09.2015**

Sir,

I/we hereby declare the following in the context of the aforementioned tender that:

- a) The entire tender document has been discussed in the Board meeting and a resolution has been concurred for participation in the tender (copy enclosed)
- b) We are not involved in any litigation that may have an impact of affecting or compromising the delivery of services as required under this tender
- c) We are not blacklisted / defaulted in any manner by any Central / State Government / Public Sector Undertaking in India.
- d) In case any false documents submitted and found any time in future the firms shall be liable to be proceeded against as per prevailing laws.

**Yours faithfully,**

**Authorised signatory**

**(Stamp)**

**Annexure-II of Finance Department Office Memorandum 4939 dtd 13.2.12, Govt of Odisha  
Model Bank Guarantee Format for Performance Security**

[Ref Para 22(i1)]

To

WHEREAS----- (*name* and address of the supplier) (hereinafter called "the supplier") has undertaken. in pursuance of contract no----- dated----- to supply -----(description of goods and services) (herein after called "the contract")'

AND WHEREAS it has been -stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein, as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we, are guarantors and responsible to you on behalf of the supplier. up to a total of ----- .(Amount of the guarantee in words and figures).and we undertake to pay you. Upon your first written demand declaring the supplier to be in default under the contract 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 or the sum specified therein.

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

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

This guarantee shall be valid until the day of-----20----- .

Our branch at \* (Name & Address of the \_\_\_\_ \* branch) is liable to pay the guaranteed amount depending on the filing of claim and any part thereof under this Bank Guarantee only and only if you serve upon us at our----- \* branch a written claim or demand and received by us at our \_\_\_\_ \* branch on or before Dt.-----otherwise bank shall be discharged of all liabilities under this guarantee thereafter.

(Signature of the authorized officer of the Bank)

Name and designation of the officer

Seal.name& address of the Bank and address of the Branch

**PRICE BID**

SI No	Particulars	Price in INR
1	Cost of Solar PV pump with 3 KW PV array ,3HP DC Brushless Motor Pump Sets including all accessories etc. all complete ( MNRE-Model IV) as per the technical specification given in the tender.	
2	Cost of Installation, commissioning and testing of the systems in farmer's field	
3	CMC for 5 years from the date of Commissioning 1 <sup>st</sup> year	
	2 <sup>nd</sup> year	
	3 <sup>rd</sup> year	
	4 <sup>th</sup> year	
	5 <sup>th</sup> year	
	Total CMC for 5 years	
4	Grand Total (1+2+3)	

**All taxes as applicable from time to time shall be paid extra.**

**Signature of the bidder with Seal**