



**ODISHA RENEWABLE ENERGY DEVELOPMENT AGENCY
BHUBANESWAR**

Invites Tender

For

Supply, Installation (Erection), Testing, Commissioning, Warranty and Comprehensive Maintenance Contract for a period of 5 years of various types Solar Micro Pumping System in the state under “Dug well based Solar Pump Irrigation System”

Tender Call Notice- 1790

Dt- 14.05.2018

Revised and Final documents

Date of release of bid	14.5.2018
Pre-bid meeting held	25.5.2018 at 11.30 AM
Revised & final online bid document hoisting	28.5.2018
Date and time of last submission online	18.6.2018 at 5.00 PM
Date and time of submission of hard copy of documents.	21.6.2018 at 1-00 PM
Opening of Techno-commercial bid (Part-I)	21.6.2018 at 3-30 PM
Date of opening of the price bid(part-II)	To be informed to the qualified bidders.

S-3/59, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR-751010

Phone : (0674) 2585898,2581552,2580554. Fax:2586368

Website: www.oredaorissa.com, Email: ceoreda@oredaorissa.com

CONTENTS

Sl No	Items	Page
1	Disclaimer	3
2	Notice inviting tender	5
3	Online submission of bid	6
4	Checklist of documents to be submitted	13
5	Forwarding letter	14
6	Letter of Authorisation	15
7	Undertaking	16
8	The Scope of work	18
9	Eligibility Criteria	21
10	Instructions to Bidder	23
11	Commercial terms and conditions	28
12	Technical specification	35
13	Structural drawing	42
14	Documentation Format	44
15	CMC format	45
16	BG format	49
17	Price bid for online only, not in hard	50-54

Disclaimer

Kindly Note:

1. This document is not transferable
2. Though adequate care has been taken for preparation of this document following all circulars, specification of MNRE, 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 at any time before date of submission of bid.
4. While the bid document 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.



ODISHA RENEWABLE ENERGY DEVELOPMENT AGENCY
Under the Department of Science & Technology
Government of Odisha
S/59,MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR-751010, ODISHA
Website : www.oredaorissa.com E-mail : ceoreda@oredaorissa.com

NOTICE INVITING E-TENDER

NO: 1790 /OREDA

DTD-14.05.2018

ODISHA RENEWABLE ENERGY DEVELOPMENT AGENCY invites sealed e-tenders **in two part bidding system** from manufacturer of pump and solar module for Supply, Installation (Erection), Testing, Commissioning, Warranty and Comprehensive Maintenance Contract for a period of 5 years for “Dug well based Solar Pump Irrigation System” in the state of Odisha on rate contract as scheduled below.

Date of release of bid	14.5.2018
Pre-bid meeting held	25.5.2018 at 11.30 AM
Revised & final online bid document hoisting	28.5.2018
Date and time of last submission online	18.6.2018 at 5.00 PM
Date and time of submission of hard copy of documents.	21.6.2018 at 1-00 PM
Opening of Techno-commercial bid (Part-I)	21.6.2018 at 3-30 PM
Date of opening of the price bid(part-II)	To be informed to the qualified bidders.

Interested prospective bidders may visit OREDA’s website www.oredaorissa.com and www.tenderwizard.com/OREDA for details relating bidding process and all other terms and conditions. The bidders can view the tender documents from www.oredaorissa.com website free of cost. Amendments if any will be published in the OREDA website only. No further notification will be made in the news paper.

Sd/-dt10.2018
Chief Executive, OREDA

DETAIL OF NOTICE INVITING TENDER

ODISHA RENEWABLE ENERGY DEVELOPMENT AGENCY invites sealed e-tenders **in two part bidding system** from manufacturer of pumps and solar module for Supply, Installation (Erection), Testing, Commissioning, Warranty and Comprehensive Maintenance Contract for a period of 5 years of Dug Well Based Solar Pump Irrigation in the state of Odisha on rate contract.

Particulars	Estimated Cost (Rs.)	Earnest Money Deposit (Rs.)	Tender processing fee Non refundable (in Rs.)	Non refundable Cost of Bid document	Last date/time for submission of bids	Date and time of opening of bid
Supply, installation, commissioning including warranty and Comprehensive Maintenance Contract for a period of 5 year of solar water pumping systems of various capacity complete in all respect as per the technical specification(MNRE/ IEC /BIS), schedule of materials and terms and condition of the of the work award from time to time on the basis of the lowest price arrived at within a period of minimum one year of the valid tender under the scope of work	5000 project likely to enhance by 30% , 30,00,00,000	10,00,000	2300 or as admissible	Rs. 10500/-	Online 18.6.2018 5.00 PM Hard copy 21.6.2018 at 1.00PM on	21.6.2018 at 3-30 PM on

Interested prospective bidders may visit OREDA's website www.oredaorissa.com and www.tenderwizard.com/OREDA for details relating bidding process and all other terms and conditions. **The bidders can view the tender documents from www.oredaorissa.com website free of cost. The authority reserves the right to accept / reject any part thereof or all the bids without assigning any reason.**

Sd/-dt10.2018
Chief Executive, OREDA

ONLINE SUBMISSION OF BI

General Information

- i) Interested bidders may visit OREDA's website www.oredaorissa.com or www.tenderwizard.com/OREDA for details. **Tender documents can be viewed free of cost.**
- ii) Bidders who want to submit bid shall have to pay the **tender cost**. The tender cost is required to be paid in shape of **Demand draft** only, drawn in **favour of Chief Executive, OREDA payable at Bhubaneswar**. The tender cost is inclusive of VAT @ 5% and is non refundable.
- ii) The bidders shall have to submit the non-refundable tender processing fee in e-payment mode only. The processing is inclusive of service **tax**.
(NOTE: For tender processing fee to K.S.E.D.C. Ltd. Bangalore, the bidder can use various modes of e-payment facility available through Tender wizard Portal, i.e. by Credit Card, Debit Card, Net Banking).
- iv) The bidders shall have to scan the Demand Draft / Bank guarantee towards **EMD, Tender Cost, Signed copy of** unconditional acceptance of all terms and conditions of the tender, **Signed copy of** Confirmation to Technical Specifications and all **other documents as required in the tender** and upload the same in the prescribed form in .pdf or .jpg format in addition to sending the originals.
- v) The bidders are advised to register their user / farmer ID, Password, company ID on website www.tenderwizard.com/OREDA by clicking on hyper link "**Register Me**".
- (v) Any clarifications regarding the scope of work and technical features of the project can be had from the undersigned during office hours

NB: All subsequent addendum/Corrigendum to the tender shall be hoisted in OREDA's official web site www.oredaorissa.com and www.tenderwizard.com/OREDA only.

For and on behalf of OREDA

A. MODE OF SUBMISSION OF BID:-

- i) The bidder shall submit the bid in Electronic Mode only i.e. in www.tenderwizard.com/OREDA portal. The bidder must ensure that the bids are received in the specified website of the OREDA by the date and time indicated in the Tender notice.
- ii) Bids submitted by telex/telegram will not be accepted.
- iii) The OREDA reserves the right to reject any bid, which is not submitted in electronic mode and according to the instruction, stipulated above.

(A-1) PARTICIPATION IN e-TENDER:-

ACQUISITION OF DIGITAL SIGNATURE CERTIFICATE

- i) For all the user / farmers it is mandatory to procure the Digital Signatures of **Class III only**.
- ii) Contractors / Vendors / Bidders / Suppliers are requested to follow the following steps for registration.

(A-2) REGISTRATION IN TENDER WIZARD PORTAL

- i) Log in www.tenderwizard.com/OREDA Click "Register", fill the online registration Form.
- ii) Payment shall be made to KSEDCL, Bangalore for vendor registration in tender wizard portal in **e-payment** mode only.
- iii) As soon as the verification is done the e-tender user / farmer ID will be enabled/provided.

(A-3) ON-LINE REQUEST FOR e-TENDER DOCUMENTS.

After viewing Tender Notification in www.tenderwizard.com/OREDA if bidder intends to participate in tender, he has to use his e-tendering User / farmer ID and Password which has been received after registration and acquisition of DSCs (Digital signature certificate). If any Bidder wants to participate in the tender he has to follow the instructions given below.

1. Insert the PKI (which consists of your Digital Signature Certificate) in your System.
(Note: Make sure that necessary software of PKI be installed in your system)
2. Click / Double Click to open the Microsoft Internet Explorer
3. (This icon will be located on the Desktop of the computer).
4. Go to Start > Programs > Internet Explorer. Type www.tenderwizard.com/OREDA in the address bar, to access the Login Screen.
5. Enter e-tender User / farmer Id and Password, click on "Go". Click on "Click here to login" for selecting the Digital Signature Certificate. Select the Certificate and enter DSC Password. Re-enter the e- Procurement User / farmer Id Password
6. Click "Un Applied" to view / apply for new tenders.
7. Click on Request icon for online request. After making the request, bidder has to pay the requisite tender processing fee (as indicated in tender notice) through **e-payment** facility only available in the portal. Bidders will receive the Tender Documents which can be checked and downloaded by following the below steps.

8. Click to view the tender documents which are received by the user / farmer. Tender document screen appears.
9. Click “Click here to download” to download the documents.

NOTE: For vendor registration and payment of tender processing fee to KESDCL, the bidder can use various modes of e-payment facility available through Tender wizard Portal, i.e. by Credit Card, Debit Card, Net Banking.

(B) ONLINE SUBMISSION OF BID

The bidders shall have to scan the Demand Draft / Bank guarantee towards **EMD , Tender Cost**

, **signed copy** of “unconditional acceptance of all terms and conditions of the tender”, Singed copy of “confirmation to technical specification” and **other documents** as required for the tender and **upload** the same in the prescribed form in .pdf or .jpg format in addition to sending the original **except bid sheets (.xls)** prior to last date and time of receipt of bids as specified in tender Notice. Tender processing fees is mandatory & to be paid on **e-payment** mode as stated elsewhere in the document. The attachments should be properly renamed before uploading.

(B-1) PROPER FILLING UP OF THE PRICE SCHEDULE:

The bidder should fill up the Techno commercial and price schedule properly in the bid sheets provided in .xls format and up-load the same without changing the file name. The tender may be rejected if the schedule of price is submitted in incomplete form.

NB: The bid sheets (.xls file) shall be uploaded in www.tenderwizard.com/OREDA portal, prior to online closing of the tender. By no other means (except online) price bid shall be accepted for evaluation of tender.

- i. After completing all the formalities, Bidders will have to submit the tender as specified in NIT and must take care of all instructions. Prior to submission, verify whether all the required documents have been attached and uploaded to the particular tender or not.

Note down / take a print of bid control number once it displayed on the screen

- ii. Tender Opening event can be viewed online.
- iii. Competitors bid sheets are available in the website for all participated bidders.

NOTES:

For any assistant, Contact:

E-Tendering help desk number: 080-

40482000/121/133/140(Bangalore) OREDA Help Desk-

09776823641/09937140591

(C) DEAD LINE FOR SUBMISSION OF BIDS

- i) Soft copy of the bid shall be uploaded through the portal www.tenderwizard.com/OREDA on or **before the online submission time and date as stipulated in the bidding document.**

DD towards Tender cost, DD/BG towards Bid Security, tender processing fee acknowledgement & a set of all uploaded documents including uploaded Techno-commercial Bid must be received by OREDA at the address specified not later than the time and date stated in the tender notification.

- ii) In the event of the specified date for the submission of bids being declared a holiday for OREDA, the bids will be received on the next working day as per the time indicated in tender notification.
- iii) OREDA may, at its discretion, extend this deadline for submission of bids by amending the Bidding Documents in accordance with Instruction to Bidders for the reasons specified therein at any time prior to opening of, in which case all rights and obligations of Employer and bidders will thereafter be subject to the deadline as extended.

(D) LATE BIDS

- i) Soft copy of the bid will not be uploaded on the portal after expiry of submission time and the bidder shall not be permitted to submit the same by any other mode. In such case, even if the bidder has submitted the specific documents in hard copy in original (viz., bid security, tender cost & any other document) within the stipulated deadline, its bid shall be considered as late bid. The hard copy submitted [specific documents (viz., bid security, tender cost.)] shall be returned unopened to the bidder.
- i) Hard copy of the bid security i.e EMD in shape of DD/BG if received by OREDA after the last date for submission of the bid the same will be considered as late bid even if the bidder has uploaded the soft copy of the bid within the stipulated deadline. In such a case, the soft part of the bid uploaded on the portal shall be sent unopened to "Archive" and shall not be considered at all any further.

(E) MODIFICATION AND WITHDRAWAL OF BIDS:-

- i) Bidder may modify or withdraw their bids through the relevant provisions on the portal www.tenderwizard.com/OREDA **up to due date and time of submission of bid indicated in tendernotification**
- ii) The Bidders may modify and resubmit their bids as per the provisions given in the portal.

- iii) Bidders may withdraw their bids through the relevant provisions of mentioned in the portal.
- iv) **No bid shall be modified/ withdrawn after the dead line for submission of bids. Withdrawal/modification of bid before the expiry of bid validity shall result forfeiture of Bidder's bid security.**

SUBMISSION OF HARD COPIES OF THE BIDS AND SEALING AND MARKING:-

(A) Hard copies of the following items should only be submitted to OREDA

All the papers of bid documents as per the check list **except the price bid** duly signed & should be uploaded in **e-tender** portal. Hard copy (i.e EMD, Tender cost & signed e-tender document) shall be submitted OREDA office at S-57, Mancheswar Industrial Estate, Bhubaneswar 751010 before tender closing date and time.

Submission of any documents other than the asked documents can't be received at any cost. This may lead to the rejection of bid.

(B) Technical bid:

The Electronic Form/Template of the bid for the Techno-Commercial bid, as available on the portal, shall be duly filled and scanned copies of documents in support of meeting the minimum qualifying requirement of the tender shall be given as attachments.

(C) Financial bid:

The Electronic Form/Template of the Price bid (as available on the portal) shall be duly filled in.

Any condition in regards to financial aspects, payments, terms of rebate etc beyond the prescribed financial terms of OREDA will make the bid invalid.

Therefore it is in the interest of the bidders not to write anything extra in the Price Bid except price.

ACCEPTANCE/REJECTION:

OREDA reserves the right to accept / reject any or all Tenders without assigning any reason thereof and alter the quantity of materials mentioned in the Tender documents at the time of placing purchase orders. Tender will be summarily rejected if:

- i) Bid security is not deposited either in shape of Bank Draft in favor of OREDA payable at Bhubaneswar or in Bank Guarantee.

Note: Bid security against previous Tenders, if any, will not be adjusted towards Bid security against this Tender.

- ii) Complete Technical details are not enclosed.

iii) Tender is received after the last date for what-so-ever reasons.

PROCEDURE FOR OPENING THE BIDS:

The procedure of opening of the bid shall be as under

- The TECHNICAL BID shall be opened at the time & date mentioned in the bid notice by OREDA in the presence of bidders, who choose to be present. If necessary, the firms may be called for Technical Presentation the schedule for which will be intimated by OREDA.
- The Price bid shall be opened after evaluation of technical suitability of the offers. The date for opening of Price bid shall be communicated subsequently. The Price Bid of only those bidders shall be opened who qualify in the technical bid.

****Contactors/Vendors are advised to upload their tender documents well in advance to avoid last minutes disappointed***

Background

Department of Agriculture and Farmer Empowerment, Govt of Odisha has launched a scheme Dug well Based Solar Pump Irrigation for marginal farmer having min 0.5 acre of plat and a dug well in his plot to irrigate with solar submersible / surface pumps. Initially 5000 farmers will be covered within one year. This may be supported by Science & Technology Dept / MNRE, GOI. OREDA will execute the energy process along with documentation, MIS, online uploading of systems details and fund mobilization. The implementation mechanism broadly will be as follows

- Farmer will apply online in agrisnetodisha portal.
- Village Agriculture Worker(VAW) will physically verify & upload photo through mobile app. Which will be validated by Orissa Space Application Centre(ORSAC).
- Accepted cases will be approved by the Collector & D.M.
- Farmer will select the vendor & auto generate go-ahead.
- Farmer will deposit farmer share to OREDA designated account.
- OREDA will install & upload photo through mobile app.
- DA&FP(O) will release State share to OREDA.

In view of the maintenance issues observed a scoring on the qualification criteria has been envisaged. In view of the large geographical spread and limited time available for completion of the project it is contemplated to allocate the supply / installation by packages as per cluster of districts. The farmers will have choice of the rates as per the category of solar pumps with L1 rate in that category. 10 bidders as per the scoring subject to their acceptance of the L1 will be qualified. **L1 bidder in each category shall have the claim of minimum 30% of the allocation on successful phase wise firm work order completion as far practicable depending upon the choice of the farmers.**

Check list of documents to be submitted along with the bid. This is indicative and to be thoroughly read in the documents

Sl no	Particulars	Complied	Page-no / Flag
1	Bank draft for Rs.10,500/- or or exempt as admissible with proof of exemption	Bank No Dt	Envelope
2	Bank draft / BG for Rs.10,00,000/- towards Earnest Money deposit or exempt as admissible with proof of exemption	Bank No Dt	Envelope
3	Forwarding letter & Undertaking duly signed and stamped by the bidder. Undertaking to unconditionally accept all terms and conditions of the bid document with the endorsement by Board Resolution		
4	Valid document registering the status of the bidder as manufacturer and quality control certificate		
5	Copy of the PAN card of the bidder's firm		
6	Copy of the GSTIN card of the bidder's firm		
7	Copies of latest Tax clearance certificate / returns		
8	Document of summarized average annual turnover of 5 crore for last three years duly signed and stamped by a registered Chartered Account. No annual report or balance sheet(Pl read detail in eligibility criteria).		
9	Proof of supply and installation of minimum 500 pumps (AC / DC / surface / submersible) or 400 Kwp combine SPV systems in the entire country in Govt / PSU / Govt Agencies (Pl read detail in eligibility criteria)		
10	Valid Test reports of offered Solar water pumping systems of capacity in the name of the bidder (Pl read detail in eligibility criteria)		
	Model Applied for (Certificate or Acknowledgement)		
11	Package Applied, all or sl no		
12	Undertaking for Indigenusness (min 30 % domestic content) of the supplied items		
13	A self certificate on not debarred / black listed / default in any govt organization.		

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

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

Subject: Submission of tender for the supply / installation of Design, Manufacturing, Testing, Supply, Installation, Commissioning & Maintenance of **Dug well based Solar Pump Irrigation.**

Sir,

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 any reasons thereof and shall not be held liable for any such action.
- (c) Any genuine changes made by the department in the interest of the work with respect to the technical requirement during the course of project implementation will be acceptable.

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

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 the supply / installation of Design, Manufacturing, Testing, Supply, Installation, Commissioning & Maintenance of Dug well based Solar Pump Irrigation.

Ref: Tender Call Notice No. -----/ OREDA, dtd -----.

Sir,

I/we hereby authorise Ms. /Mr. _____, Designationof 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

Name and designation of the attesting officer with stamp.

Yours faithfully

Head of the organization

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 entire tender document has been discussed in the Board meeting and a resolution has been concurred for participation in the tender.
3. 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.
4. All terms and conditions of the tender including the rates quoted by us shall remain valid for a period of minimum one year from the date of opening of the technical bids.
5. 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.
6. 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 against award of the supply / installation.
7. In case we fail to commence or complete the supply / installation as per the time schedules 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 security deposit/EMD made by us against the award of the supply / installation.
8. 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.
9. 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.
10. We are not blacklisted / debarred / defaulted in any manner by any Central / State Government / Public Sector Undertaking in India.

11. 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.

12. Our TIN registration no. is _____

The PAN No. under the Income Tax Act 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.

Self Scoring as per evaluation basis for mainstream category.

Sl	Parameters	Max Points	Self-Scoring
A	Organizational Capability-	75	
1	Period of Registration	15	
2	Quality Certification	10	
3	Experience of installation	30	
4	Annual Turnover	20	
B	Technical Capability	25	
1	Pump Certificate or as applicable	10	
2	Customer Relationship Centre report of OREDA	15	
	Total	100	

Signature of bidder with stamp & date

1. SCOPE OF WORKS

The broad scope of the supply / installation includes design, manufacture, supply, installation, testing commissioning, warranty, operation & Maintenance for 5 years for Solar energy based pump for irrigation, drinking water supply comprising providing, installing, testing and commissioning of Solar Photovoltaic pumps sets with all accessories adhering to the standardized norm / BIS / MNRE/IEC/CE specification (Micro Pumping Application, 2016-17, as per the valid test report issued to the bidder of the authorized test centre) in the entire state in the current year 2018-19.

All tax deductions at source applicable for contract will be made irrespective of Tax clearance documents subject to bifurcation of the price components.

- a) Collection of the list of site / village including, locations of the bore wells /dug well, water discharge feasibility reports, if necessary, shadow free area etc. from OREDA/authorized officer.
- b) Visit to the site / village and identifying the designated bore well and selection of site for construction
- c) Deciding the location required in site / habitations after discussing with the authorized officer / gram panchayat/ user / farmer.
- d) Transportation of all materials to the village and keeping the same in safe own custody within village/ site. OREDA shall not be the consignee to receive the materials supplied/ delivered.
- e) Installation of the solar PV water Pumping systems, BOS, solar PV array and required plumbing material as per the technical specifications and standards provided in the tender and testing the same in the presence of Dept Authorized Officer / gram panchayat . In case of sanitary well the float / pedestal arrangement to provide, if necessary.
- f) Intimate OREDA, RE Cell Officials and Executive Engineer / Authorized Officer, Divisions on assignments.
- g) Installation of the water delivery system (piping) up to the existing out let / inlet point.
- h) After initial operation and testing of the pumping system handing over the same to the Gram panchayat / Dept Authorised Officer/user / farmer to be maintained by the firm for 5 years under CMC.
- i) Collection of all documents, including geo-tagged photographs, if connected, of the

installed systems and preparing the joint commissioning reports.

j) Submission of all documents as detailed in the tender document including the joint Commissioning report to OREDA

k) Periodic maintenance of the system as detailed in this tender.

l) Opening of service centre/keeping servicing personnel and making available all essential spares in the vicinity of the solar water pumping system will give the desired performance with least interruption.

m) Submission of periodic reports and returns as per the MIS prescribed by OREDA from time to time.

n) Supply of the complete systems, including all necessary components, sub-components, spares, tools, tackles etc. as per technical specifications given or compliant with MNRE, IEC, BIS as relevant, in this document including packing, forwarding, safe storage, handling, commissioning, trial and performance testing and handing over, transit insurance.

o) The solar panel shall be warranted for ten years with rated performance. Security cum PGF(PBG) for the corresponding amount for the period warranty is to be retained by this office.

p) Solar PV pumps of respective capacity depending upon the yield of bore well will be utilized for the purpose of water supply in the user / farmer / utility as per the requirement of the village.

r) Comprehensive Maintenance for 5 years and Performance guarantees for the rated delivery / discharge of water as per standard test condition.

s) All civil structures and site clearances for setting up of the complete job are to be obtained before installation, if not provided in the work order.

t) All structural drawings to be got approved from OREDA/ any other competent authority, if necessary, unless provided in the work award.

u) While implementing Solar pumping system in the village/ site the physical condition of the area on shades / water logging during rain should be taken into consideration.

v) There should not be any damage what so ever in the site / village due to setting up of the solar pumping system and later there is no leakage of any water connection of the said project the in the village / site.

w) While cabling the array care must be taken such that no loose / open cables lie

anywhere related to the supply / installations.

x) Adequate training has to be provided to the persons to be designated by OREDA/ pump user / farmers in maintenance and upkeep of the installed system. The installed and commissioned systems are to be handed over to the Village Committee / respective Authorised Officer / user / farmer. The bidder must also provide a detailed operation and maintenance manual specific to the installed systems.

y) Before execution of the supply / installation the yield test of the selected tube well shall be carried out by the agency to ensure the sustainability of the system.

z) Supply/ installation of all essential transparency boards, markers and all essential; and required documents and manuals clearly explaining the operation and maintenance and trouble shooting of various portion of the system in local language.

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 and such tender documents shall be rejected.

- a) The bidder must be a company registered under the Indian Companies Act 1956 and a firm registered under statutory tax rule. The bidder must have valid GST registration certificate.
- b) And the bidder must be a manufacturer of pumps (or latest controller) or solar module only. A copy of the valid registration certificate (DIC, NSIC indicating store, MSME, and Registrar of Companies) to that effect is to be attached. No Dealer, Supplier, EPC firm or Consortium of any category is allowed.
- c) The bidder's company/firm must have established quality assurance systems and organization in line with the requirements under ISO 9001:2015 and ISO 14001:2015 certification. However ISO 14001:2015 certificate can be submitted in the name of OEM along with the bid.
- d) And the Bidder must have Test Certificate issued in the name of the bidder only **for the offered model of pump** of Solar PV Water Pumping System from a MNRE authorized valid test center or acknowledgement(valid certificates to be submitted before opening of financial bids).
- e) And the bidder company must have minimum **average annual turnover of Rs.5 crore** in last three years (2015-16, 2016-17,2017-18). **A summerised certificate from Chartered Accountant to that effect is to be attached only.**
- f) And the bidder's company/ firm must have designed, manufactured, tested and commissioned minimum 500 nos of solar PV pumps (ac/dc/surface/submersible) or combined 400 Kwp solar PV installation with pump and power plants in any of government departments/ PSU/ Public Institutions in the country during last 3 years (Copy of the **certificates only, no other documents** from the authorized / designated public officer should be furnished in table below).

Sl no	Name of govt /public user / farmer agency	Name of scheme / year	No of pumps/ system (kwp) installed	Certificates attached

- g) Notwithstanding the clauses above max. of 20% of the tendered quantity shall be considered for **local small and medium entrepreneurs** / MSME who are already associated with OREDA having valid NSIC store materials of solar pump or entrepreneur with valid patent in solar pumps subject to their meeting all specifications and terms / conditions and the respective model matching the L1 price. **OSIC & NSIC(Odisha) are to apply in this category only, if so occurs. The valid test certificate of the relevant pump has to be submitted before taking up of the assigned work. The bidder in this category is not to fill in the price bid format on line. In case of such price offer received the bid is liable to be cancelled at any stage of evaluation.**
- h) The firm must not have been debarred / blacklisted / defaulted by any Govt. Dept, agency, PSUs / institution / agencies / autonomous organisations. A self-certificate by an authorized person of the bidder's company/firm is to be attached.

3. INSTRUCTIONS TO BIDDERS

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

1. A Bidder shall submit a single offer-bid only. The bidders shall be responsible for properly uploading the relevant documents in the e-tender portal in the specified location and Tender Inviting Authority shall not be held liable for errors or omissions done while uploading the online bid.
2. Bidders must submit their bids for relevant items as stated in this bid document.
3. Demand Drafts towards cost of document and EMD should be submitted in a separate envelop placed inside the envelope containing the technical bid.
4. Bids must be submitted in English language only.
5. Incomplete, telegraphic or conditional bids shall not be accepted.
6. 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 except the statutory government revision.
7. 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.
8. Valid Tax return document duly attested must be submitted along with the bid. **All rules and circulars of 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.**
9. Deviations in terms and conditions, Specification of material, Inspection clause etc. will not be accepted under any condition.
10. 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.
11. 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.

12. Hard copies of Bids received late due to postal delay or otherwise will not be considered.
- 13. The bidders are required to furnish their offers in the price online only**
14. Since timely execution of supply / installations is of paramount importance, requests for extension of time shall not be ordinarily entertained.
15. Canvassing in any manner shall not be entertained and will be viewed seriously leading to rejection of the bid.
16. Certificate to the effect that the systems to be supplied are indigenous & not fully imported must be furnished.
17. Power of attorney to sign the agreement on behalf of bidders & partnership deed articles, if any, should be enclosed along with original bid documents.
18. Notice inviting Tender, bid documents, prescribed Technical bid, price bid, terms & conditions will form the part of the tender.
19. All pages of the bid documents must be signed & sealed by the authorized person on behalf of the bidders.
20. 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.
- 21. A pre bid meeting was convened on 25.5.18. in the conference hall of OREDA. After discussion, deliberation and written statement / suggestions of the representative, the final tender document revised and approved by the technical committee is uploaded on the website replacing the previous one. Submission of document shall start hereafter.**
22. Any clarification on the technical specification and commercial terms and conditions may be clarified in writing from OREDA.
23. Deviation of any commercial terms and condition and technical specification shall not be entertained under any circumstances
24. Bidders may in their own interest visit the sites in order to develop a clear understanding of the logistics and other features of the sites before submitting bids and under taking may be attached in the tender document. OREDA will not be responsible for any incidental or consequential losses of the firms while execution and till expiry of the period of maintenance.
25. All the bidders shall essentially indicate the break-up of prices as shown in Price bid.
26. If qualified, the bidder must open a local office at Bhubaneswar before commencement of the supply / installation for coordination of all jobs and 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 bidder.**

27. On award of contract the qualified bidder shall be termed as executing agency.

28. Opening of the bids:

The procedure of opening of the bid shall be as under

- i) The technical bid opening is ONLINE. The date of opening of the technical bid is only published in advanced. The date of opening of the price bid will be decided after verification of those bidders who qualify in the technical bid evaluation and will be informed in advance.
- ii) The online opening of the technical bid and the price bid shall be done by the Chief Executive / or his authorised representative as per bid schedule. The prospective bidders can access to the online opening by logging in to the e-tender portal with the registered digital signature. Bidders / its authorised representative may not come to this office of OREDA for the opening of the technical or price bids.
- iii) In the event of the specified date for opening of the bids being declared holiday, the bid shall be opened at the appointed time and venue on the next working day.
- iv) In the event of the bid and claims in the online documents are materially missing or of substantial error or want of required qualifications, shall stand disqualified and rejected.

29. Evaluation of Bids

- i) The documents submitted as technical bids shall be scrutinized by a bid evaluation committee duly appointed as per the following Technical Evaluation and scoring pattern.
- ii) The bid evaluation committee may also verify the veracity of claims in respect of the known performances of the items offered, the experience and reputation of bidder in the field. The Tender Inviting Authority, if required reserves the right to inspect the facility of the bidder for verification of information furnished in the bid.
- iii) The decisions of the bid evaluation committee is final on whether the bidders are responsive or non responsive as per the eligibility criteria set.
- iv) The verification of the items shall be conducted by the Technical Committee in which the external experts from the user / farmer institutions / funding agency, whenever necessary.

- v) The decision of the technical committee will be intimated to the qualified bidders

Technical Evaluation and Scoring Patterns for mainstream category.

Sl#	Parameters	Max Points	Evaluation Criteria
A	Organizational Capability-	75	
1	Should have min 5 years experience in solar PV / any pump manufacturing or as required for the state registered	15	5 years - 5 Marks Beyond 5 years - for each year 2 marks up to maximum 10 marks
2	Quality Certification	10	- ISO9001 – 5 Marks - ISO14000-5 Marks
3	Experience of installation of min 500 pumps (AC/DC/Surface/ submersible) in Govt sector or PSU or as required for the state	30	500 pumps/400 kwp-10 Marks Beyond that For every 200 pumps/200kwp 5 marks up to maximum 20 marks
4	Should have Annual turnover @ Rs.5.00 cr for last 3 years	20	5 cr for 3 years -5 marks Beyond 5 cr for every 5 cr every year 5 marks max 15 marks
B	Technical Capability	25	
1	Pump must have IEC or MNRE approved test lab certificate with 500 Wp module for BLDC / PMDC / AC submersible / surface with validity period	10	
2	Proven record of maintenance as per Customer Relationship Centre report of OREDA	15	
	Total	100	

1. Bidders have to score 70% for successful in Technical evaluation fulfilling all the minimum criteria up to 10 bidders as per the scoring order.
2. In case of all 10 bidders not reaching 70% the score of higher order up to 10 bidders shall be qualified.

30. Price bid opening

- i) The opening of the price bid of the technically qualified bidders shall be done online by the Tender Inviting Authority or the authorized representative and only the price bids in the proper format of the those firms qualified in the evaluation of the technical bids shall be opened.
- ii) The lowest rate quoted in each category pump in proper format complete in all respect will be accepted except for those under local category.
- iii) As it will be preferential lowest rate contract with empanelled vendors no price preference is warranted.

31. 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

Sd/-dt10.2018

Chief Executive

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

Signature and Seal of bidder

4. COMMERCIAL TERMS & CONDITIONS

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 rate determined on the basis of price bids. On receipt of the awarded work the same should be submitted duly signed by the authorised person on each page within 7 days duly endorsed by the respective Authorised Officer / Division and OREDA RE Cell Officials as acceptance of the terms and conditions. In case of non submission of the same duly complied the said award shall stand cancelled.

4.1 **Rate:**

The offer should indicate the unit cost of the system, Installation & Commissioning charges, CMC and taxes & duties separately (Annexure E). The unit cost must be inclusive of packing, forwarding, loading & unloading charges, cost of insurance and transportation FOR destination in the entire state where the system will be installed as per the supply / installation order.

Bidders may offer for any of the categories of pump and any of the packages. No relaxation of qualification criteria for specific package is entertained.

4.2 **Tax & Duties etc.:**

All taxes and duties applicable (revised at the time of delivery of materials or as per service period) from time to time will be paid. All statutory deductions applicable for the period of the project shall be effected.

4.3. **Earnest Money Deposit:**

4.3.1 Earnest money deposit Rs.10.00 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 for 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 or BG valid for 120 days (Annexure-D1) 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 as work award 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. **All benefits as per the State Govt policies will be applicable for local eligible firms only.**

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 **5 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 **10 years validity** from the date of supply, installation and commissioning till the completion of respective warranty period of the module.

The said deposit would be forfeited, if the supplies are not made and performances are not as per the Terms & Conditions of the purchase order. 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 2nd PBG will be refunded after the expiry of 10 years i.e module performance guarantee after successful performances.

All benefits as per the State Govt policies will be applicable for local eligible firms only.

4.5 Programme Execution Schedule:

The programme of execution of the supply, installation and commissioning shall be carried out as per the schedule given in the supply / installation order subject to issue of water yield test / layout documents by the respective Nodal Officer / Authorised Officer in phased manner. In case yield test / feasibility report are available at the time of issue of supply / installation order the entire job has to be completed within maximum 4 months of sites clearance reports from User / farmer / OREDA.

Execution of supply / installation 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.

4.5.1 Upon intimation about commissioning of the systems by the executing firm a joint inspection will be carried out by the representatives of the executing firm, OREDA and other officers of user / farmer agency /from Govt of Odisha / Govt. of India.

4.5.2 The issuance of a JCC shall, in no way relieve the executing firm of its responsibility for satisfactory operation of the solar pumping systems.

4.6 Validity of offer:

The price bid offer (Annexure-E1-E4) must be kept valid minimum 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, if any. The validity can be mutually extended for a suitable period, if situation demands, with all terms and conditions as per the tender.

- (i) If at any time during the said period the empanelled bidders enhance schedule of reduce the price of such offered items or sells such items to any other Govt Organization at a price lower than the price chargeable under the contract or include additional schedule of supply, the supplier shall forthwith notify such modification to OREDA.
- (ii) Any qualified firm violating to aforesaid conditions whenever noticed shall be delisted from the panel.
- (iii) The lowest price offered less shall be just and genuine to implement the project with the farmer capability.

4.7 Tax return:

The bidders must submit attested copy of valid up to date Tax clearance / tax return 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 the period as per MNRE norms 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 or its subtle executants(s) 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 Purchaser 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 judgement of the purchaser, 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 deputed 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:

Full payment will be made in phases of solar water pumping system installed out of the total supply / installation order issued against the respective in the following manner

Total value of systems with full taxes / duties will be made after commissioning of the project. The check list of documents to be submitted along with the bills and requisite 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 all technical detail of the installed system, location map of the System, GPS based photograph wherever available of the solar PV pumping, System handing over report, Warranty certificate, Joint commissioning certificate or any other documents as may be required as per work award.

4.13 Allocation of award & Execution:

All supply / installation orders shall be placed with the state local registered office of the qualified empanelled bidders having valid Odisha GST registration.

Minimum 30 % total allocation (to the extent possible) of work will be awarded to the lowest evaluated responsive bid (L1) in each relevant

category. However, the firm work order will be placed on availability and feasibility of sites and subsequent performance of the firm.

In case L1 rate being quoted by more than one bidder, the work to be executed shall be equally divided among them.

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 for the bidders other than the local category. Successful bidders willing to accept the L1 price may be duly empanelled and arranged in order of their quoted price up to L10 bidder **technically qualified**. Allocation of work award shall be as per the previous order issued and the overall execution performance. **It will be explored to allocate 20 % of the work to local bidders depending upon the previous association with OREDA in implementation of RE.**

4.14 Comprehensive Maintenance Contract:

CMC amount in the price offer must be min 5% (@1% each year of the total of supply, installation & commissioning. The qualification of the L1 bidder will be decided based on the CMC bench mark.

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 payment of annual maintenance charges under the Comprehensive Maintenance Contract shall depend upon the functionality of the system duly certified by the concerned Authorised officials of OREDA. Upon receipt of such certificates CMC amount as applicable shall be paid at the end of 1st, 2nd, 3rd, 4th and 5th 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 as per statutory Govt policies. 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:

If any dispute of any kind whatsoever arise between Nodal Agency and the vendor in connection with or arising out of the work award including without prejudice to the generality of foregoing, any question regarding the existence, validity or termination, the parties shall seek to resolve any such dispute or difference by mutual consent.

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

Annexure-A

Ministry of New and Renewable Energy**SOLAR PHOTOVOLTAIC WATER PUMPING SYSTEMS**
For MICRO PUMPING Applications
(2016-17)**5. INTRODUCTION:**

A Solar Photovoltaic (SPV) Water Pumping System consists of:

PV Array :

Capacity in the range of **200Wp to 500Wp**.

These ranges of Solar Photovoltaic (SPV) Water Pumping Systems are basically for “MICRO PUMPING” applications. However, these may also be used for “Drinking Water Applications wherever such capacities are required”.

PV Array should be mounted on a suitable structure with a provision for manual tracking.

Motor Pump Set (Surface or submersible) :

It could be installed on a suitable bore-well, open well, Water Reservoir, Water stream, etc. It could be:

- D.C. Motor Pump Set (with Brushes or Brush less D.C.)
OR
- A.C. Induction Motor Pump Set with a suitable Inverter
- Electronics :
 - Inverter for A.C. Motors (Appropriate Electronic Controller in case of B.L.D.C. motors)
 - Electronic Protections.
- Interconnect Cables and
- “On-Off” switch.

II. PERFORMANCE SPECIFICATIONS AND REQUIREMENTS

Solar PV Water Pumps with PV Panel capacity in the range of 200 Wp to 500 Wp may be installed on a suitable bore-well / open well / Water Reservoir / Water stream etc.

FOR 0.25 hp Motor Pump Set and 300 Wp Solar 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),

the minimum water output from a Solar PV Water Pumping System at different “Total Dynamic Heads” should be as specified below:

- (i) Minimum 10, 000 liters of water per day from a Total Dynamic Head of 10 metres and the shut off head being at least 12 metres.
- (ii) Minimum 5, 000 liters of water per day from a Total Dynamic Head of 20 metres and the shut off head being at least 30 metres.
- (iii) Minimum 3000 liters of water per day from a Total Dynamic Head of 30 metres and the shut off head being at least 45 metres.

FOR 0.5 hp Motor Pump Set and 500 Wp Solar 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), the minimum water output from a Solar PV Water Pumping System at different “Total Dynamic Heads” should be as specified below :

- (i) Minimum 20, 000 liters of water per day from a Total Dynamic Head of 10 metres and the shut off head being at least 12 metres.
- (ii) Minimum 10, 000 liters of water per day from a Total Dynamic Head of 20 metres and the shut off head being at least 30 metres.
- (iii) Minimum 6000 liters of water per day from a Total Dynamic Head of 30 metres and the shut off head being at least 45 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 500 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 75 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

siliconsolar cells should be used in the PV array for the SPV Water Pumping

systems.

- 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.
- **There should be a Name Plate fixed inside the module which will give:**
 - a. **Name of the Manufacturer or Distinctive Logo.**
 - b. **Model Number**
 - c. **Serial Number**
 - d. **Year of manufacture**
 - e. **Made in India (Subscribe in words)**

IV **MOTOR PUMP-SET**

- The SPV water pumping systems may use any of the following types of motor pump sets:
 - a. Surface mounted motor pump-set
 - b. Submersible motor pump set
 - c. Floating motor pump set
 - d. Pressure booster pumps
 - e. Any other type of motor pump set after approval from

Test Centers of the Ministry.

- The “Motor Pump Set” should have a capacity in the range of **0.2 hp to 0.5 hp and** should have the following features:

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.

The motor of the capacity ranging from 0.2 hp to 0.5 hp should be AC, DC or BLDC type. The suction and delivery head will depend on the

site specific condition of the field.

submersible pumps or Surface pumps could also be used according to the dynamic head of the site at which the pump is to be used.

- It is recommended that all parts of the pump and the motor of the submersible pumps should be made of stainless steel or suitable grade of plastic. The impellers and other internal parts can be of suitable grade of modified PPE resins (example Noryl) or Polycarbonate or equivalent.

- The manufacturers of pumps should self-certify that, the pump and all **external parts of motor used in submersible pump which are in contact with water, are of stainless steel or suitable grade of plastic.** 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.

- 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.

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

V. **MOUNTING STRUCTURES.**

The PV modules should be mounted on metallic structures of adequate strength and appropriate design, which can withstand load of modules and high wind velocities up to 150 km per hour. The support structure used in the pumping system should be hot dip galvanized iron with minimum 80 micron thickness.

To enhance the performance of SPV water pumping systems, manual or passive or auto tracking system **must** be used. For manual tracking, arrangement for seasonal tilt angle adjustment and three times manual tracking in a day should be provided.

VI. **ELECTRONICS AND PROTECTIONS**

- Inverter could be used, if required, to operate an A.C. Pump. The inverter must have IP 54 protection or must be housed in a cabinet having at least **IP54** protection.
- Controller for BLDC motor driven pumps, if required may be used. 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.

VII. **ON/OFF SWITCH**

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

VIII. **WARRANTY**

The PV Modules must be warranted for output wattage, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years. The whole system including submersible/ surface

pumps shall be warranted for 5 years. Required Spares for trouble free operation during the Warrantee period should be provided along with the system

IX. OPERATION AND MAINTENANCE MANUAL

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

X. NOTES

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).

There should not be any compulsion to use only one or the other type of Motor-pump set. The beneficiary may select an appropriate Model (i. e. Capacity of PV Array and Type of Motor Pump Set) as per site requirement.

Solar Photovoltaic Water Pumping Systems should be tested and certified by an authorized test centre of the Ministry to meet the performance and water discharge norms specified in section II above.

Variation in the modules wattage in the PV Array should be within + or - 3 % so as to minimize the mismatch losses in the PV Array.

The capacity (i.e. overall wattage) of the PV Array submitted to the Test Centers should be within - 3% or + 5 % of the specified value.

However, the capacity of the PV Array, supplied in the field could be more than the 5 % of the specified value (but not less than 3% of the specified value).

Particulars	Model-I	Model-II	Model-III	Model-IV	Model-V	Model-VI
PV Array(wp)	300	300	300	500	500	500
Motor Capacity(hp)	0.25	0.25	0.25	0.50	0.50	0.50
Shut off dynamic head(m)	12	30	45	12	30	45
Water output(lit /day)	10,000	5000	3000	20000	10000	6000
Total head(m)	10	20	30	10	20	30

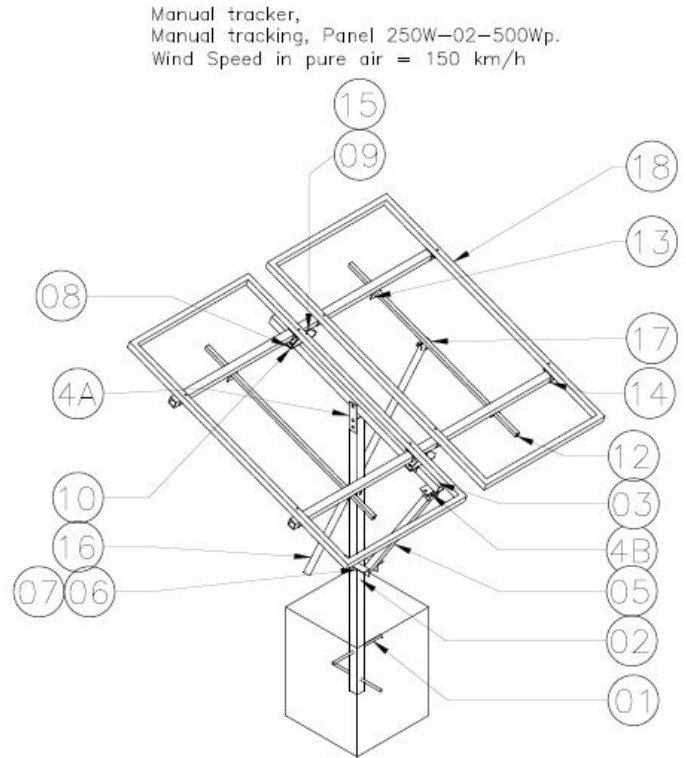
* Water output figures are on a clear sunny day with three times tracking of SPV panel, under the “Average Daily Solar Radiation” condition of **7.15 KWh/ sq.m. on the surface of PV array (i.e. coplanar with the PV Modules).**

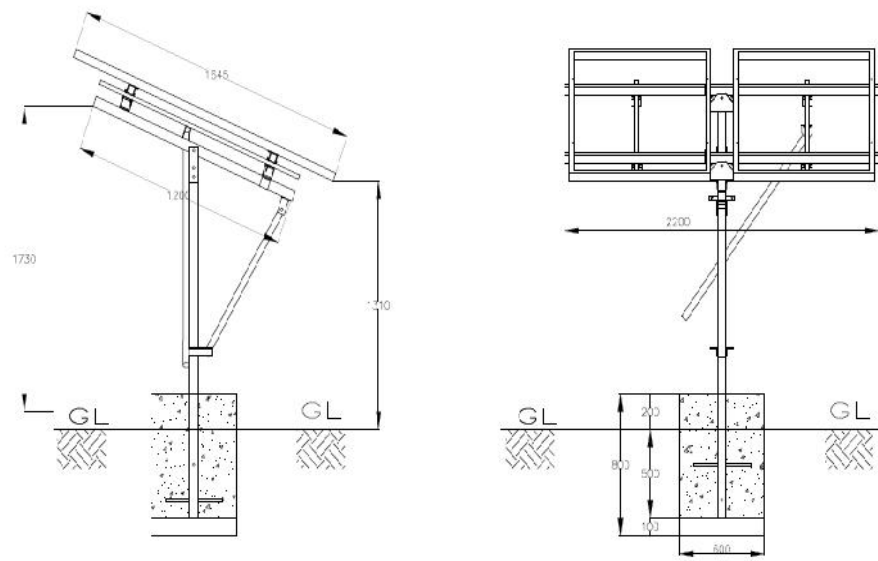
Notes:

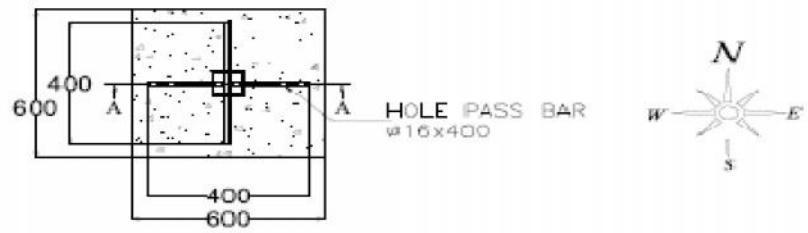
1. For higher or lower head / PV capacity, or in between various models; water output could be decided as per the clause II. (i.e. performance specifications and requirements) specified earlier.
2. In case of a surface pump, the suction head to be limited to 6 metres.

Template Module Mounting Structure, manual tracking provision Structural Drawing Template

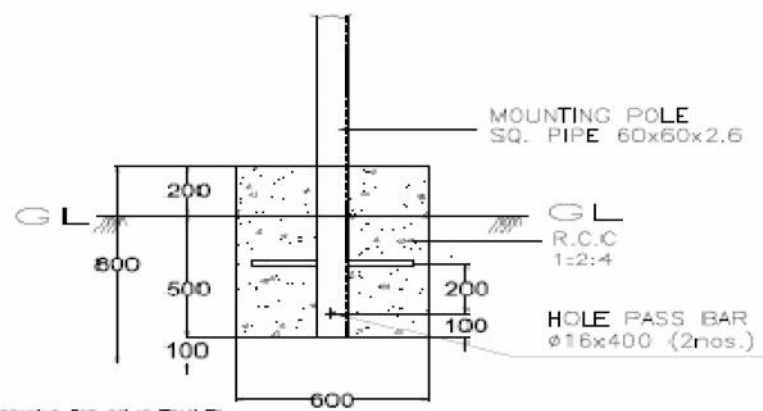
SRL NO.	PART NAME	MOC	SPECIFICATION	QTY.
1	HOLE PASS BAR	M.S. PLATE	DIA 16x400L	2
2	MOUNTING POLE	YST310 (HDG)	MS SQ.TUBE 50x50x2.6, L2000.	1
3	BEAM	YST310 (HDG)	MS SQ.TUBE 50x50x2.6, L1200.	1
4A	MOUNTING POLE CONNECTOR	M.S. PLATE	M.S. PL., 200x80x6.	2
4B	BEAM TO CROSS BEAM BRACKET	M.S. FLAT	MS FLAT 60x5.L180	1
		M.S. FLAT	MS FLAT 50x5.L90	2
4C	MTG. POLE CONNECTOR PL.	M.S. FLAT	MS FLAT 40x5.L160	2
5	CROSS BEAM	YST310 (HDG)	MS SQ.TUBE 50x50x2.6, L800.	1
6	CROSS BEAM CONNECTOR (L.H)	ISA G.I	ISA 40x40x5.L200	1
7	CROSS BEAM CONNECTOR (R.H)	ISA G.I	ISA 40x40x5.L200	1
8	HINGE LOWER PART	M.S. SHEET	MS SHEET 276x195x THK 4	2
9	HINGE UPPER PART	M.S. SHEET	MS SHEET 210x40, THK3	2
10	HINGE FIXATION	M.S. SHEET	MS SHEET 260x60, THK3	2
11	CENTRAL RAIL	YST310 (HDG)	SQ. TUBE 40x40x2.L 2200	2
12	CONNECTING TUBE	YST310 (HDG)	SQ. TUBE=25x25x2, L=1300	3
13	CONNECTING CLAMP	ISA G.I	ISA 40x40x5.L70	5
14	MODULE FIXATION CLAMP	S.S	S.S 32x1.2, W=25	8
15	BUSH COLLER TYP.	NYLON	OD=40, ID=13, L=59	2
16	TRACKING PIPE	YST310 (HDG)	Ø42-4x3.2 THKx1300L	1
17	ACTUATOR UPPER BKT	M.S. SHEET	MS SHEET 75x4.L150	1
18	PANEL		1960x996	4
19	LIGHTENING ARRASTER.FLAT	G.I	FLAT 40x5x550, LOCKING FLAT 25x5x170	1
20	EPOXY POST INSULATOR	EPOXY	EPOXY Ø50xL=50	1
21	CU. FLAT	COPPER	FL 25x90x3 Ø4.	1
22	LIGHTING ARRASTER	COPPER	CU. Ø25x1090	1
23	PUMP CONTROLER CLAMP	G.I. FLAT	FLAT 25x5xØ4	1
24	LIGHTING ARRASTER & CONTROL BOX	G.I. FLAT	FLAT 25x5TH., L3000	1







TOP VIEW



1) FOUNDATION DRAWING FOR SOLAR TRACKER
500W (250V-2NO. PANEL)

Joint Commissioning Cum Handing Over certificate of Solar Pump

(1) Village/ Site GP Block District

(2) Supply / installation Order No.: _____ Date: _____

(3) Actual Date of Commissioning: _____

It is hereby certified that the executants M/s-----
----- has successfully installed & commissioned
the SPV Pumping system with all components and recommended workmanship as
below

S N	Name of the items installed & commissioned	Unit	Quantity	Remark
1	Solar module of ----- wp of -----make as per test certificates only submitted to OREDA	No.		
2	-----hp pump of make-----, model----- -- SI no equivalent pump as peer test certificate only with MPPT pump controller with suitable indications and controls	No.		
3	Module mounting structure as per MNRE / BIS standard	Set		
4	All riser pipes, cables, wiring, control & accessories	Set		

The supply / installation has been fully executed as per the supply / installation order and it is handed over in good working condition as detailed above. The executants shall provide complete warranty against all manufacturing defects and defective/erroneous installation for a period of 5 years from this date of handing over. (The warranty certificate, engineering documents have been handed over to OREDA. The above-mentioned SPV Pump is hereby handed over by the executants to----- in fully satisfactory working condition to the user / farmer. The safety and security of the system is with the user / farmer. No individual / community user / farmer shall remove / dispose of the system or part thereof.

Seal and
Signature

Seal and
Signature

Seal and
Signature

Seal and
Signature

Sarpanch / User /
farmer

Authorized
Personnel

Authorised
Officer

OREDA
Officer

ANNEXURE-C

Warranty –cum-Comprehensive maintenance of Solar Pumping Systems for a period of 5 years (in Non-Judicial Stamp Paper of Rs-----) to the full compliances of CRC.

All materials, components of the Solar Pumping System during the period of maintenance shall be the property of Village Committee / user / farmer's authorised person where the system is installed.

This Warranty applies to the items / goods manufactured and supplied by the "The executants" consisting of pump set, controller, solar panels and accessories as per the format.

The "Company" warrants the solar water pumping system only against manufacturing defects. Faulty materials &/or workmanship for a period of 5 years from the date of commissioning.

Within the warranty period "The executants" undertakes to repair or replace any part/component found to be having manufacturing defects or unserviceable immediately upon its knowledge. "The executants" shall be under no obligation under this warranty, if the company is satisfied that the defects are due to improper usage, negligence, any modifications / alterations or tampering, accident, act of god or installation / repairs carried out by any person not duly authorized by "The executants" or by any reason beyond the control of "The executants" such as theft, war, earthquake, flood or storm & such other natural calamities like hailstorm, typhoon or cyclone uprooting of trees or electric poles, wire & radio or T.V. Antennas etc. causing accident damage to the system.

Under the warranty, no responsibility is accepted for any consequential loss or damage caused by any defect due to tampering to the system.

Any part, component or system replacement shall be granted in exchange of the defective part, component or system to the company by.

This warranty in no case shall extend to payment of any monetary consideration or compensation.

----- (hereinafter referred as "The executant") offers warranty of the Solar water pumping system as under:

This warranty excludes any damage inflicted by animals such as monkeys, domestic animals, birds or any creatures or miscreants.

This warranty excludes damages to the pump / motor due to foreign material like stand, clay coming along with water or due to collapse of bore well / tube well formation.

Regular maintenance of the all Systems for a period of 5 years of warranty against manufacturing defects after commissioning along with supply of consumable items as and when necessary and submission of daily performance of solar submersible pump systems shall come, under the comprehensive maintenance contract.

The break down maintenance of the entire system including supply of necessary spare

parts, if any are already under the coverage of warranty clause of the General Terms & Condition and special terms & condition for a period of 5 years from date of commissioning of solar pumping systems. The operation and maintenance schedule of the SPV solar pumping systems during the 5 years contract period shall be as detailed below.

1. 5 years comprehensive maintenance period shall begin on the date actual commissioning for the solar pumping systems. The requisite numbers of qualified and trained personnel are required to be deputed / available in the state.
2. The security of the solar pumping systems will rest with the village committee/ user / farmer till such time comprehensive maintenance of the solar submersible pump systems.
3. The deputed personnel shall be qualified and well trained so that they can handle any type of operation hazard quickly and timely.
4. The deputed personnel shall have to keep the record on quarterly basis for the solar pump systems as per format to be supplied after commissioning of the solar submersible pump systems.
5. The deputed personnel shall be in a position to check and test all the equipment regularly, so that preventive actions, if any, could be taken well in advance to save any equipment from damage.
6. The Village Committee / user / farmer shall keep clean the solar pumping systems in all time.
7. Normal and preventive maintenance of all systems all electrical connection, changing of tilt angle of module mounting structure shall be the responsibility of the supplying agency.
8. During the maintenance period of 5 years of the solar all systems, if there is any defect of any component of all systems the supplier shall be responsible for immediate replacement / rectification. The damaged component may be repaired, if it is understood after examination that after repairing performance of the component shall not be degraded, otherwise the defective component shall have to be replaced by new one without any extra cost.
9. Comprehensive Maintenance Instructions:
 - 9.1 Proper maintenance of the systems shall be carried out by the executants during the maintenance period of 60 months with 6 monthly / annual review check up of systems and equipment in detail with purchaser.
 - 9.2 Properly qualified and trained personnel well versed in maintenance of SPV systems and knowledge of computers with approval from purchaser shall be deployed at site for maintenance.

- Systems personnel shall be deputed on such basis so that a qualified / trained person with a minimum Technical qualification should be available at site always during the maintenance period.
- Supplier shall depute an engineer of their company for the maintenance of the systems who shall be fully responsible for the complete maintenance and optimum operation of the systems. The name and contact nos. of this engineer shall be notified to the purchaser for the purpose of contact, responsibility and correspondence with regard to all trouble shooting.
- Replacement & repair of damaged parts shall be carried out immediately during the maintenance period so as to ensure at least 95% uptime.
- Systems operation reports in a format prescribed (Management Information System) by the purchaser shall be furnished by the supplier on a weekly and monthly basis or as may be required.
- Systems shall be operated as per the standard practices to ensure proper safety measures.
- The supplier shall ensure replacement of worn out parts and component during the comprehensive maintenance period for which purpose the supplier shall carry and maintain minimum inventory of spares at the systems and its supply / installations.
- In case of delay in repair & maintenance and non-observance of schedule, the purchaser shall have the right to impose any penalties including forfeiture of performance security.
- In case of any fault, the fault must be removed within 2 days of receipt of the complaint, failing which a penalty of Rs.1,000/- per day shall be charged. In case of delay of more than 7 days OREDA may on its take up repair by any suitable method and the cost of the repair along with the penalty amount will be charged from the supplier to be paid or deducted from the performance security deposit by invoking the BG in part to the extent of the repair cost.

9.3 Routine, preventive, breakdown & Capital Maintenance :

- Routine and Preventive maintenance shall include such checks and maintenance activities quarterly / half yearly and yearly basis which are required to be carried out on all the components of the solar submersible pump systems to minimize breakdown and to ensure smooth and trouble free running of the all systems. The supplier shall be responsible to carryout routine and preventive maintenance and replacement of each and every component/ equipment of the solar submersible pump systems and

- he shall provide all labour, materials, consumables etc. for routine and preventive maintenance of his own cost.
- Breakdown maintenance shall mean the maintenance activity including repairs and replacement of any component or equipment of the all systems which is not covered by routine and preventive maintenance and which is required to be carried out as a result of sudden failure / breakdown of that particular component or equipment while the systems is running. The supplier shall be responsible to carry out breakdown maintenance of each and every component of the solar pumping systems and he shall provide the required manpower, materials, consumables, components or equipment etc. for breakdown maintenance at his own cost irrespective of the reasons of the breakdown/ failure.
- Capital maintenance shall mean the major overhaul of any component or equipment of the solar pumping systems which is not covered by routine, preventive and breakdown maintenance which may become necessary on account of excessive wear & tear, aging which needs repair / replacement. The capital maintenance of solar pumping systems and all civil structures shall normally be planned to be carried out on an annual basis. For this purpose a joint inspection by the supplier and purchaser shall be carried out of all the major components of the solar submersible pump systems, about two months in advance of the annual maintenance period.

The decision of the purchaser shall be final and binding.

Signature of the bidder

ANNEXURE-D (I)

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

FORMAT FOR BANK GUARANTEE FOR EMD

On stamp paper of requisite amount

B.G. No:.....

Whereas 'OREDA' has invited tender for the work of Design, supply, installation, commissioning and maintenance of SPV Systems vide Tender Call Notice No.-----/OREDA AND WHEREAS M/S. (Name and address of the firm), who having submitted their tender hereinafter referred to as the 'Tenderer' and have agreed to deposit to the 'OREDA' an amount of Rs..... (Rupees) as per the terms and conditions of the Tender Document AND WHEREAS the 'OREDA' also willing to accept a Bank guarantee in lieu of payment by demand draft of any amount equivalent to the amount of earnest money required to be deposited by the Tenderer to the 'OREDA' i.e. an amount equal to Rs..... which as guarantee will be kept valid up to ------In consideration of the 'OREDA' having agreed to consider the Bid proposals submitted by the tenderer without depositing the amount of earnest money and against this Bank guarantee, we(name and address of the bank) hereby undertake and guarantee to make payment to the 'OREDA' the amount of Bid earnest money deposit at any time (time being the essence of the contract) when the 'OREDA' asks for the same as per the terms and conditions of the tender Document.

The bank further undertakes not to revoke this guarantee during its currency except with the previous consent of the 'OREDA' in writing and the guarantee shall be continuous and irrevocable guarantee up to a sum of Rs..... (Rupees.....)only provided always that any indulgence or relation on the part of the 'OREDA' to the said tenderer with or without the consent of the bank shall not prejudice or restrict remedies against the bank nor shall the same in any event be a ground of defence by the Bank against the 'OREDA'.

In case the 'OREDA' Force puts forth a demand in writing on the Bank for the payment of amount full or in part against this bank guarantee, the bank will consider that such demand by itself is a conclusive evidence and proof that the tenderer has failed in complying with the terms and conditions stipulated by the 'OREDA' in its bids and payment will be made to the 'OREDA' without raising any disputes regarding the reasons for such failure on the part of the tenderer.

The bank shall not be discharged for release from this guarantee by any arrangement between the tenderer and the 'OREDA' with or without the consent of the bank or any alterations in the obligations of the parties or by an indulgence, forbearance shown by the 'OREDA' to the tenderer.

This guarantee shall be in addition to and without prejudice to any other securities or remedies which the 'OREDA' may have or hereafter possess against the tenderer and the 'OREDA' shall be under no obligations to marshal in favour of the bank any such securities or fund or asset that the 'OREDA' at its absolute discretion may vary, exchange, renew, modify or refuse to complete or enforce or assign any security or instrument.

The Bank agrees that the amount hereby guaranteed shall be due and payable to the 'OREDA' on 'OREDA' serving a notice requiring the payment of the amount and such notice shall be served on the bank either by actual delivery thereof to the Bank or by dispatching thereof to the bank by Registered post at the address of the said Bank. Any notice sent to the Bank at its address by Registered Post shall be deemed to have been duly served on the Bank notwithstanding that the notice may not in fact have been delivered to the Bank.

In order to give full effect to the provisions of this guarantee the bank thereby waives all rights inconsistent with the above provisions and which the bank might otherwise as a guarantor be entitled to claim and enforce.

We,.....(name and address of the bank), lastly undertake not to revoke this guarantee during its currency except with the previous consent of the 'OREDA' in writing.

"Notwithstanding anything contained herein",

- (i) Our liability under this guarantee shall not exceed Rs..... (Rupees only).
- (ii) This Bank Guarantee shall be valid up to -----
- (iii) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if we receive from you a written claim or demand on or before ----- (date of expiry of Guarantee)".

Dated:-.... day of 2018

ANNEXURE- E1

FORMAT FOR FINANCIAL OFFER FOR SUPPLY OF SOLAR PV PUMPING SYSTEM AS PER TERMS AND CONDITIONS.

For BLDC(Submersible)**Model-V, PV capacity 500wp, Motor 0.5 hp**

Sl No	Package of Districts	No of Solar Pump	For customer / user / farmers anywhere in the state excluding taxes per system			
			Supply	Installation	AMC @5% annuaised each year	Total
1	Balasore, Bhadrak, Kendrapada, Jajpur, J. S.Pur , Cuttack, Khurda, Puri, Nayagarh	1235				
2	Ganjam, Gajapati, Kandhaml, Koraput, Malkangiri, Raygada, Nuapada, Kalahandi, Nawarangpur	1130				
3	Bolangir, Boudh, Sonepur,	800				
4	Sambalpur, Sundergarh, Bargarh, Jahrsuguda, Deogarh	755				
5	Angul, Dhenkanal, Mayurbhanj, Keonjhar	1080				

Format of price schedule is a sample for the Bidder's. The bidder's are instructed to fill the rates in prescribed price schedule available on Portal. Price schedule should not be submitted in Technical Bid and to be rejected.

Signature of bidder with seal & date

ANNEXURE- F2

FORMAT FOR FINANCIAL OFFER FOR SUPPLY OF SOLAR PV PUMPING SYSTEM AS PER TERMS AND CONDITIONS.

For PMDC (Submersible)

Model-V, PV capacity 500wp, Motor 0.5 hp

Sl No	Package of Districts	No of Solar Pump	For customer / user / farmers anywhere excluding taxes per system			
			Supply	Installation	AMC @5% annuaised each year	Total
1	Balasore, Bhadrak, Kendrapada, Jajpur, J. S.Pur , Cuttack, Khurda, Puri, Nayagarh	1235				
2	Ganjam, Gajapati, Kandhaml, Koraput, Malkangiri, Raygada, Nuapada, Kalahandi, Nawarangpur	1130				
3	Bolangir, Boudh, Sonapur,	800				
4	Sambalpur, Sundergarh, Bargarh, Jahrsuguda, Deogarh	755				
5	Angul, Dhenkanal, Mayurbhanj, Keonjhar	1080				

Format of price schedule is a sample for the Bidder's. The bidder's are instructed to fill the rates in prescribed price schedule available on Portal. Price schedule should not be submitted in Technical Bid and to be rejected.

Signature of bidder with seal & date

ANNEXURE- F3

FORMAT FOR FINANCIAL OFFER FOR SUPPLY OF SOLAR PV PUMPING SYSTEM AS PER TERMS AND CONDITIONS.

For AC(Submersible)**Model-V, PV capacity 500wp, Motor 0.5 hp**

Sl No	Package of Districts	No of Solar Pump(a approx)	For customer / user / farmers anywhere excluding taxes per system			
			Supply	Installation	AMC @5% annuaised each year	Total
1	Balasore, Bhadrak, Kendrapada, Jajpur, J. S.Pur , Cuttack,Khurda, Puri, Nayagarh	1235				
2	Ganjam, Gajapati, Kandhaml, Koraput, Malkangiri, Raygada, Nuapada, Kalahandi, Nawarangpur	1130				
3	Bolangir, Boudh, Sonapur,	800				
4	Sambalpur, Sundergarh, Bargarh, Jahrsuguda, Deogarh	755				
5	Angul, Dhenkanal,Mayurbhanj, Keonjhar	1080				

Format of price schedule is a sample for the Bidder's. The bidder's are instructed to fill the rates in prescribed price schedule available on Portal. Price schedule should not be submitted in Technical Bid and to be rejected.

Signature of bidder with seal & date

ANNEXURE- F4

FORMAT FOR FINANCIAL OFFER FOR SUPPLY OF SOLAR PV PUMPING SYSTEM AS PER TERMS AND CONDITIONS.

For Surface(mention AC /DC)

Model-IV, PV capacity 500wp, Motor 0.5 hp

Sl No	Package of Districts	No of Solar Pump	For customer / user / farmers anywhere in the state excluding taxes per system			
			Supply	Installation	AMC @5% annualised each year	Total
1	Balasore, Bhadrak, Kendrapada, Jajpur, J. S.Pur , Cuttack, Khurda, Puri, Nayagarh	1235				
2	Ganjam, Gajapati, Kandhaml, Koraput, Malkangiri, Raygada, Nuapada, Kalahandi, Nawarangpur	1130				
3	Bolangir, Boudh, Sonapur,	800				
4	Sambalpur, Sundergarh, Bargarh, Jahrsuguda, Deogarh	755				
5	Angul, Dhenkanal, Mayurbhanj, Keonjhar	1080				

Format of price schedule is a sample for the Bidder's. The bidder's are instructed to fill the rates in prescribed price schedule available on Portal. Price schedule should not be submitted in Technical Bid and to be rejected.

Signature of bidder with seal & date

Indicative Allotment of Districts

Sl. No.	District	No. of Dug wells to be energised	Sl. No.	District	No. of Dug wells to be energised
1	Angul	360	16	Kandhamal	100
2	Balasore	10	17	Kendrapara	10
3	Bargarh	50	18	Keonjhar	370
4	Bhadrak	10	19	Khurda	150
5	Bolangir	600	20	Koraput	100
6	Boudh	100	21	Malkangiri	10
7	Cuttack	335	22	Mayurbhanj	150
8	Deogarh	60	23	Nabarangapur	50
9	Dhenkanal	200	24	Nayagarh	500
10	Gajapati	20	25	Nuapada	120
11	Ganjam	280	26	Puri	10
12	Jagatsinghpur	20	27	Raygada	250
13	Jajpur	190	28	Sambalpur	360
14	Jharsuguda	25	29	Sonepur	100
15	Kalahandi	200	30	Sundergarh	260