

JAIPUR VIDYUT VITRAN NIGAM LTD.

Invites

Request for Proposal (RFP)

For

Survey, Supply, Installation, testing & Commissioning of Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation purpose, along with 5 years Guarantee/ Comprehensive Maintenance Contract (CMC) in accordance with MNRE norms,

At

various locations in the State of Rajasthan.

Issued by:

Jaipur Vidyut Vitran Nigam Limited

Old Power House, Ram Mandir, Bani Park, Jaipur – 302016

Telephone No.: +91-0141-2200334,

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Website: <http://www.jaipurdiscom.com>

NOTICE INVITING PROPOSALS

RFP No: 01

Dated: 04/07/2017

Jaipur Vidyut Vitran Nigam Limited, invites Proposals from eligible Bidders for **selection of Contractors** for Survey, Supply, Installation & Commissioning of various capacities/heads of Solar Photovoltaic AC & DC Surface / Submersible Pumping Systems for irrigation purpose, with provision for manual three times tracking in a day and remote monitoring of the pump (as per MNRE norms)along with 5 years guarantee / Comprehensive Maintenance Contract (CMC), there after sales services for 5 years at the cost of beneficiary etc. in accordance with MNRE/BIS/IEC/CE norms at various locations in state of Rajasthan.

For the of implementation above mentioned work, Bidder should submit their bid proposal along with non-refundable Bid Processing Fee and all requisite documents complete in all respects on or before 09/08/2017 up to 02:00 p.m. in the office of The Superintending Engineer (RE), JVVNL, Old Power House, Ram Mandir, Bani Park, Jaipur in prescribed format. Bid proposals received without the prescribed Bid Processing Fee (RISL fee) and Bid Security (EMD) will be rejected. In the event of any date indicated above is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein. Technical Bid will be opened on 09/08/2017 at 03:00 p.m. in the presence of authorized representatives of Bidder who wish to be present.

Bid documents which include eligibility criteria, technical specifications, various conditions of Agreement, formats, etc. can be viewed from JVVNL website <http://www.jaipurdiscom.com> and can be downloaded from <https://www.eproc.rajasthan.gov.in> for online submission.

It may be noted that the costs of preparing the proposal and of negotiating the contract, including visits to JVVNL office and elsewhere, are not reimbursable as a direct cost of the proposal and JVVNL is not bound to accept any/ all of the proposals submitted. All Successful Bidders are expected to commence the Work on the Time-schedule specified in the work order as per the Scope of Work, General & Specific Terms and Conditions mentioned herein.

Superintending Engineer (RE)
JVVNL, Jaipur

DISCLAIMER

1. Though adequate care has been taken while preparing the RFP document, the Bidder shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately.
2. JVVNL reserves the right to modify, amend or supplement RFP documents, including all formats and annexure, at any time before Bid submission date. Interested and eligible Bidders are advised to follow and keep track of JVVNL's web-site for updated information. JVVNL is not obligated to send/ communicate separate notifications for such notices/ amendments/ clarification etc. in the print media or individually. JVVNL shall not be responsible and accountable for any consequences to any party.
3. While this RFP has been prepared in good faith, neither JVVNL nor their employees or advisors make any representation or warranty, expressed or implied, or accept any responsibility or liability, whatsoever, in respect of any statement 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 or completeness of this RFP, even if any loss or damage is caused by any act or omission on their part.
4. The capitalized term or any other terms used in this RFP, unless as defined in RFP or repugnant to the context, shall have the same meaning as assigned to them by the Electricity Act, 2003 or Company Act, 1956/2013 or Indian Partnership Act, 1932 or Limited Liability Partnership Act, 2008 or Income Tax Act, 1961 and the rules or regulations framed under these Acts.

Jaipur Vidhyut Vitran Nigam Limited
Office of the Superintending Engineer (RE)
Old Power premises Banipark Jaipur -302006 (Rajasthan)

E Mail: serejvnl@yahoo.co.in

BID SPECIFICATION No. TN-01

SCOPE OF WORK:-"Supply, Installation and Commissioning of Solar photovoltaic (SPV) Pump sets for Irrigation purpose including 5 years guarantee/ CMC in state of Rajasthan against TN-01":-

Important events and dates are as under:-

S. No.	Event	Date
1.	Issue of e-bid Document	Available on website http://eproc.rajasthan.gov.in & www.jaipurdiscom.com
2.	Schedule down load date & time	05/07/2017 up to 10:00 PM. at http://eproc.rajasthan.gov.in
2.	Last date & time of bid submission (online)	09/08/2017 up to 02:00 PM. at http://eproc.rajasthan.gov.in
3.	Date and time of opening of bid (online)	09/08/2017 up to 03:00 PM. at http://eproc.rajasthan.gov.in
4.	Cost of Tender Document for each lot (non-refundable)	Rs.5,900.00 (Rupees five thousand Nine hundred only), this includes GST.
5.	Tender Processing Fee for each lot (non-refundable)	Rs.1,000.00 (Rupees One thousand only) by Demand Draft /Banker cheque in favour of M.D. RISL, Jaipur payable at Jaipur
6.	EMD/Bid Security to be deposited	As mentioned in E-tender notice at http://eproc.rajasthan.gov.in
7.	Bid Fee, EMD, and Processing Fee	Up to 08/08/2017 up to 03:00 PM at the Office of Accounts Officer(TW), Old Power house, Bani park, Jaipur
8.	Date & Time of Opening of Financial Bids (Part-B)	Will be intimated later to the Technically qualified and responsive bidders as per bidding document.
9.	Bid & EMD Validity	180 days from date of opening of Techno-commercial bid

Jaipur Vidhyut Vitran Nigam Limited
Office of the Superintending Engineer (RE)
Bani Park, Near Ram Mandir, Jaipur -302006(Rajasthan)

S. No	Particulars	Description	Page nos.
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**VOLUME-I
(ITB, GCC,PQR)
SECTION-I**

INSTRUCTION TO BIDDERS (ITB)

1.0 GENERAL INSTRUCTIONS

The Jaipur Vidyut Vitran Nigam Ltd, or any authority designated herein after called 'OWNER' will receive bids in respect of services as set forth in the accompanying specification. All bids shall be prepared and submitted in accordance with these instructions. The Bidder, in his own interest is requested to read very carefully these instructions and the terms and conditions as incorporated in General Conditions of Contract and Technical specification before filling the Bid proposal form. If he has any doubt as to the meaning of this specification or any portion thereof, he shall before submitting the Bid, refer the same to the Superintending Engineer (RE), JVVNL / Jaipur in writing well in time before the specified date of opening of Bids so that such doubts may be clarified. Submission of the Bid shall be deemed to be the conclusive proof of the fact that the Bidder has acquainted himself and is in agreement with all the instructions, terms and conditions governing the specification, unless otherwise specifically indicated / commented by him in his Bid.

Bids submitted after the time and date fixed for receipt of bids as set out in the invitation to Bid may be rejected.

The works referred herein shall cover the entire scope of the proposal which include commissioning and erection & commissioning of equipment including the successful completion of performance and guarantee tests which the owner desires to get executed.

2.0 INTRODUCTION OF WORK:

JAIPUR Vidyut Vitran Nigam Limited invites proposal for Supply, Installation and Commissioning of Solar photovoltaic (SPV) Pump sets of 3 HP and 5 HP for Irrigation purpose in the area of all three discoms against TN-01

2.1 The job involves as detailed in Section-IV "**Scope of Work**", however any work if specifically not mentioned but reasonably implied for the successful implementation and good performance of the proposed work are deemed to be included and are to be executed.

2.2 The Agency is advised in its own interest to examine the bid documents, instructions, forms, terms and general information. Failure to provide information, which is essential to evaluate the bid or to provide timely clarification or substantiation of the information supplied or submission of bid not substantially responsive to the bid document may result in disqualification.

- 2.3 FIELD CONDITIONS: The bidder may in its own interest, before submitting the bid, inspect and examine the area involved and satisfy him regarding the field conditions and present supply system of "Area covered in scope of work". For ascertaining the field condition the Agency may contact the concerned XEN / AEN . No claim for change in the bid or terms & conditions of the contract shall be entertained on the ground that the conditions are different than what were contemplated.
- 2.4 The scope of the proposal shall be on the basis of a single bidder's responsibility, completely covering all the material supply and erection activities specified under the accompanying technical specification. It will include the following:
- (a) Detailed of the equipment
 - (b) Complete manufacture including shop testing prior to dispatch at manufacturer's premises as per contract specifications by the representative of owner.
 - (c) Providing Engineering drawings, data, operation manual, etc. for the owner's approval.
 - (d) Packing and transportation from the manufacturer's works to the site, receipt, storage, preservation and conservation of equipment at the site, pre- assembly, if any, erection, testing and commissioning of all the equipments, Reliability tests and performance and guarantee tests on completion of Commissioning.
- 2.5 Bids not covering the above entire scope of works shall be treated as incomplete and shall be rejected.

3.0 QUALIFICATION REQUIREMENTS

The qualification requirements of the bidders are mentioned in Section-III of the bidding documents. The bids of bidders fulfilling these requirements only would be considered for evaluation & award of contract.

4.0 SUBMISSION OF BIDS:

The bidders, in their own interest, are requested to read very carefully Section-I (Instruction to bidders), Section-II (General Condition of Contract), Section-III (Scope of work) & Section-V (Technical Specification) before filling the bid. The Bid documents be downloaded from JVVNL website www.jaipurdiscom.com or <http://eproc.rajasthan.gov.in> and upload the tender on website of RISL [www.http://eproc.rajasthan.gov.in](http://eproc.rajasthan.gov.in). No hard copy of the bidding documents will be provided to the bidders through this office. In case of any discrepancy found in bidding documents downloaded from the website and appended with the bid (as a bid document) and original copy of such document available in the office of Superintending Engineer (RE),JVVNL Jaipur will be considered as final document for all purpose. The cost of Bid document as published in NIT shall be furnished along with EMD before opening of bid and scan copy be upload on website of RISL. The document shall be downloaded/ uploaded in the manner prescribed in bid document.

- 4.1 Tenders shall be submitted online in the electronic format attached here to all blanks in the tender and the schedule to the specification shall be duly filled in. The completed forms, schedule(s) shall be considered as part of the contract documents in the case of successful bidder (s).
- 4.2 No alteration should be made to the format of the tender specification and schedules. The bidder must comply entirely with specification.

- 4.3 The tender and all accompanying documents shall be in Hindi/English Language and shall be signed digitally by a responsible and authorized person. The name, designation and authority of the signatory shall be stated in the tender.
- 4.4 Tender should be filled in only with ink or typed and must be submitted online after signing digitally.
- 4.5 All additions, alterations and over-writing in the bid must be clearly signed by the signatory of the bidder otherwise bid will be summarily rejected.
- 4.6 The bidder must quote the prices strictly in the manner as indicated herein, failing which bid is liable for rejection. The rate/prices shall be entered in words as well figures. These must not contain any additions, alterations, over-writing, cuttings or corrections and any other marking which leave any room for doubt.
- 4.7 The Purchase Authority will not be responsible to accept any cost involved in the preparation or submission of bids.
- 4.8 Any printed conditions of sale on the bid shall not be accepted by the purchase Authority.
- 4.9 The tender offer shall be submitted in time specified on <http://eproc.rajasthan.gov.in> in electronic format in the following manner:
- i. COVER – I for details of EMD / Valid exemption certificate/ Registration certificate with copy of letter indicating validity of B.G. / Tender processing fee and Cost of Tender document (to be filed in pdf format).
 - ii. COVER – II for Techno- Commercial Bid (to be filed in pdf format):
In this part of bid, bidder will have to furnish Guaranteed Technical Particulars in regard to all requirement details of Technical Specification (Section-IV) and confirmation of commercial terms and conditions of GCC (General Conditions of Contract) and its addendum/corrigendum, if any, along with details required in various/schedules “EXCEPT THE PRICE SCHEDULE” so that the purchaser may be able to examine whether the offer submitted is technically acceptable and also confirm to our commercial terms and conditions or not.
 - iii. COVER – III for Financial/Price Bid/BOQ (to be filed in xls format).
This price bid shall include submission of details of prices as per Schedule of the specification. The price bid will be opened only after being satisfied with Technical and Commercial Bid as per qualifying requirement stipulated in the Specification and bid of such qualified bidders will only be opened. The date of opening of such price Bids will be intimated in due course of time.
- 4.10 Bidders shall indicate in their bid the name and complete address of Excise authorities under whose jurisdiction is their works / offices falls.
- 4.11 All bids and accompanying documents shall be addressed to the S.E. (RE) Jaipur Vidyut Vitran Nigam Limited, Jaipur
- 4.12 The bidder should sign the tender documents digitally and stamped on each page.
- 4.13 The tenders given in the form other than prescribed form will not be considered.
- 4.14 Only one representative, on submission of valid authorization of the signatory of the bid, will be allowed to be present during the opening of the bid.
- 4.15 The conditional bids shall not be accepted.
- 4.16 The bidder must clearly fill up each and every particular of Guaranteed Technical Particulars annexed with Technical specification otherwise he will be responsible for Technical non-responsiveness.

5.0 DOCUMENTS TO BE UPLOADED WITH THE TENDER:

The tender shall be accompanied with the following schedules, documents. The tender who is not accompanied by any or all the following mentioned schedules, documents or is accompanied by incomplete annexure/ schedules is liable for rejection.

- a. **Cover I** for details of EMD / Tender processing fee and Cost of Tender document as detailed below:
 - i. Proof of depositing EMD (DD/Banker's Cheque) / central or state Govt. undertaking certificate for exemption.
 - ii. Proof of depositing DD/Banker's Cheque towards e- tender processing fee.
 - iii. Proof of depositing cost of tender documents (DD/Banker's Cheque).
- b. **Cover II** for Techno- Commercial Bid as detailed below duly signed and stamped:
 - i. Schedule-1 for confirmation with regard to "NIL DEVIATION" in respect of commercial terms & conditions of the specifications.
 - ii. Schedule-2 for confirmation with regard to "NIL DEVIATION" in respect of Technical terms & conditions of the specifications.
 - iii. Schedule 3A & 3 B "Qualification Requirement". Details indicating execution of works along with supporting documents like copy of W.O., completion certificate etc. specified in "Qualification requirements".
 - iv. Schedule-4 Work Completion.
 - v. Schedule-5 List of Equipments & Technical Hands.
 - vi. Power of Attorney for authorized signatory to sign the tender document digitally.
 - vii. Name & Complete address of excise authority under whose jurisdiction their works/office falls.
 - viii. Copy of latest Balance-Sheet for last 3 years.
 - ix. Name & correspondence address of the bidder along with phone /Fax No. & email address.

Cover-III For financial / price bid / BOQ (to be filled in Excel format on e-proc web site in prescribed schedule).

6.1 INFORMATION REQUIRED WITH THE PROPOSAL

- I. The bids must clearly indicate the name of the manufacturer, the type of model of each principal item of equipment proposed to be furnished and erected. The bid should also contain drawings and descriptive materials indicating general dimensions, material from which the parts are manufactured, principles of operation, the extent of pre-assembly involved, major construction equipment proposed to be deployed, method of erection and the proposed erection Organizational structure.
- II. The Bidder in the form of separate sheets, drawings, catalogues, etc. in two copies shall provide the above information.
- III. Any bid not containing sufficient descriptive material to describe accurately the equipment proposed may be treated as incomplete and shall be rejected. The Owner will retain such descriptive materials and drawings submitted by the Bidder. Any major departure from these drawings and descriptive material submitted will not be permitted during the execution of the Contract without specific written permission/ approval of the owner.
- IV. Oral statements made by the Bidder at any time regarding quality, quantity or arrangement of the equipment or any other matter will not be considered.
- V. The bidder may use in the bid Standard catalogue pages and other documents to provide additional information and data as deemed necessary.

- VI. The Bidder, along with its proposal, shall submit a list of recommended erection equipments and materials, which may be required for the purpose of erection of equipment and materials supplied under the contract.
- VII. In case the 'Proposal' information contradicts the specification requirements, the specification requirements will govern, unless otherwise brought out clearly in the technical/ commercial deviation schedule.
- VIII. The bidder shall furnish the guaranteed technical particulars in the schedule(s) provided in this document for various materials.

6.2 RECEIPT AND OPENING OF BIDS.

- I. **Bidder shall submit their bid in electronic format, digitally signed and stamped on each page. Bidder shall procure Digital Signature Certificate (DSC) as per IT act - 2000.**
- II. **The electronically received bids will be opened in the office of the **Superintending Engineer (RE)**, JAIPUR on stipulated date & time in the presence of such bidders or their authorized representative, who choose to be present. The system does not permit electronic submission of late tenders after the due date & time.**
- III. In case, the date fixed for opening of the tenders be declared as a public holiday, the bid shall be opened on the next date on which office re-opens after such holiday(s).

6.3 FORMAT AND SIGNING OF BID:

- I. The tender must contain the name, designation and place of business of the person or persons making the tender and must **submit online & signing digitally with his DSC (Digital Signature)**. Tender by a partnership firm must be furnished with full names of all the partners and should be signed **digitally** by one of the member of partnership firm or by a authorized representative indicating the designation of the person or persons, with authority letter signed by the Chairman/ Secretary other person authorized to bind the Corporation / Company in the matter.
- II. Bid by a partnership must be furnished with full names of all partners and be signed with the partnership firm name, followed by the signature (s) and designation (s) of the authorized partner (s) or other authorized representative (s).
- III. Bids by corporation/ company must be signed with the legal name of the corporation/ company by the President, Managing Director or by the Secretary or other person or persons authorized to bid on behalf of such corporation/ company in the matter.
- IV. A bid by a person who affixes to his signature the word 'President', 'Managing Director' 'Secretary', 'Agent' or other designation without disclosing his principal will be liable to be summarily rejected.
- V. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the bid.
- VI. The Bidder's name stated on the proposal shall be exact legal name of the firm.
- VII. Erasures or other changes in the bid documents shall bear the initials of the person signing the bid.
- VIII. Bids not conforming to the above requirements of signing shall be disqualified.

7.0 EFFECT AND VALIDITY OF BID :

- i. The submission of any bid connected with these documents and specification shall constitute an agreement that the bidder shall have no cause of action or claim, against the owner for rejection of his bid. The owner shall always be at liberty to reject or accept any bid or bids at his sole discretion and any such action will not be called into question and the bidder shall have no claim in that regard against the owner.
- ii. The bids shall be valid for a minimum period of 180 days (One hundred eighty) days from the date of opening of bids or 90 [ninety] days from the date of opening of financial bid whichever is later. Bids mentioning a shorter validity period than specified are likely to be summarily rejected /ignored.
- iii. Owner may ask for extension in validity period. The bidder will be at liberty to accept it or not. In case bidder agrees to extend the validity period without changing his original offer, he will be required to extend validity period of the Bank Guarantee (Submitted against the EMD) suitably.

8.0 EARNEST MONEY:

- i. The bidder shall furnish bid guarantee (Earnest Money Deposit) 80 lakh for each lot. **(Bidder must fill Schedule-F for the lots in which he wishes to participate and accordingly EMD should be furnished.)** The bidder may furnish EMD 20% in the form of DD and 80% in the form of BG payable in the name of Accounts Officer (TW), JVVNL, Jaipur. The Demand draft and BG shall be accompanied with the bid in an envelope as per instructions given in these bidding documents.
- ii. No other mode such as Postal orders/ cheques of instruments is acceptable.
- iii. In case of unsuccessful bidder, the Earnest money will be refundable on production of the original receipt within a fortnight after finalization of the tender. In case of successful bidder(s) the Earnest Money will be taken into account in arriving at the amount of the security cum performance guarantee if vendor(s) desires to furnish cash security deposit. However if the security cum performance guarantee is furnished through bank guarantee (BG) the EMD will be released consequent to acceptance of such BG.
- iv. Request for adjustments/proposals for acceptance of Earnest Money deposits, if any, already lying with the Discom's in connection with some other tenders/orders shall not be entertained.
- v. No interest shall be payable on such Deposits.
- vi. The Nigam reserves the right to forfeit Earnest Money Deposit or a part thereof in circumstances, which according to it indicate that the bidder is not earnest in accepting/executing order placed under the specification.

9.0 COST OF SPECIFICATION:

The cost of Bid document as published in NIT shall be furnished along with EMD prior to opening of bid and scan copy be upload on website of e-procurement of Govt. of Rajasthan. The document shall be downloaded / uploaded in the manner prescribed in bid document. The cost of bid and EMD shall be furnished through Bank Draft payable to Accounts Officer (TW), JVVNL Jaipur

10.0 LATE BIDS:

The system does not permit electronic submission of late tenders after the due date & time.

11.0 CLARIFICATION OR MODIFICATION OF BIDS:

To assist in the examination, evaluation and comparison of bids, Nigam may ask Bidders individually for clarification, in writing. No change in the substance of the bid shall be permitted except as required to confirm the correction of any typographical error. JVVNL may modify 'Financial bid' based on discussions with individual Bidders short-listed even after opening of 'Technical bid'.

12.0 REJECTION OF BIDS

Any action on the part of the Bidder to revise the rates / prices and modification in the substance of original tender. Submission of any supplementary information unless & otherwise asked for at his own instance after the opening of the Bid may result in rejection of the Bid and also debar him from submission of Bid to the NIGAM at least for one year.

The owner reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the owner's action.

13.0 OPENING OF FINANCIAL BID:

The date and time for opening "Financial bid" will be intimated to the short-listed Bidders by Nigam in due course through 'e'-procurement web portal. 'Financial Bid' of the Bidders, not short-listed shall not be opened.

14.0 SIGNING OF AGREEMENT:

The successful bidder shall, on receipt of Letter of Award from Nigam enter into a contract with Nigam by jointly signing an agreement. The draft of the agreement based on the terms sheet, detailed in Section-II shall be forwarded to the successful bidder for execution. The agreement shall be executed within fifteen days thereafter. The person to sign the agreement shall be duly authorized by the Bidder.

15.0 UNDERSTANDING & CLARIFICATIONS ON DOCUMENTS & SPECIFICATIONS.

The Bidder is required to carefully examine the specifications and documents and fully inform himself as to all the conditions and terms matters which may in any way affect the Work or the cost thereof. If any Bidder finds discrepancies or omissions in the specifications and documents or is in doubt as to the true meaning of any part, he shall at once request in writing for an interpretation / clarification by the owner. The Owner,

Then, will issue interpretation and clarifications as he may think fit in writing. After receipt of such interpretations and clarifications, the Bidder may submit his bid but within the time and date as specified in the Invitation to Bid. All such interpretations and clarifications shall form a part of the specifications and documents, and accompany the bidder's proposal.

Verbal clarifications and information given by the owner or his employee(s) or his representative(s) shall not in any way be binding on the owner.

16.0 DUTIES AND TAXES

- 16.1 GST and other applicable / livable Tax. in respect of the transaction between the owner and the contractor under the contract on the date of opening of bids (techno-commercial) shall be treated as included in the bid price and no additional payment on this account shall be paid by the Nigam.
- 16.2 Any income tax, surcharge on income tax and other corporate taxes including work contract tax, service tax and entry tax as applicable / livable on the goods procured from outside Rajasthan as attracted under the law, shall be deducted at source, as per the prevailing Govt. rules by payment making authority from each bill. Necessary TDS certificate shall be issued by payment making authority.
- 16.3 Deduction of cess at source @ 1% from the each running bills of all running projects of the suppliers/contractors on account of the building and other construction workers (regulation of employment and conditions of service) act, 1996 & the building and other construction workers welfare cess act 1996 and deposit the same under the following budget head through challan under intimation to the cess collector and assessing officer of the respective jurisdiction within 30 days from the deduction of cess:-
- The CESS will be deducted on whole value of contract.
- 16.5 Any statutory variation in existing rates of taxes / duties / levies / charges during contracted completion period shall be to Nigam's account. However, for claiming any such statutory variation, the contractor is required to furnish the documentary evidence / proof in support of the same for scrutiny and approval. Any downward variation in above rates of taxes / duties / levies shall have to be passed on to the Nigam.

17 POLICY FOR BIDS UNDER CONSIDERATION

Bids shall be deemed to be under consideration immediately after they are opened and until such time official intimation of award / rejection is made by the owner to the bidders. While the bids are under consideration, bidders and / or their representatives or other interested parties are advised to refrain from contacting by any means, the owner and / or his employees / representatives on matters related to the bids under consideration. The owner, if necessary, will obtain clarifications on the bids by requesting for such information from any or all the bidders, either in writing or through personal contact, as may be necessary. Bidder will not be permitted to change the substance of the bid after the bid has been opened.

18 SCOPE OF WORK / QUANTITIES

The scope of work and quantities are tentative, Nigam reserves right to delete or add any scope of work.

- (a) The quantities indicated in the accompanied schedule are only provisional and owner reserves the right of revising the same at the time of placing the order.
- (b) However the actual quantity of material and quantum of work involved shall be based on the final survey report.
- (c) The owner reserves the right to split the quantities and to entrust the order for the line to one or more bidders. The bidder shall agree to execute part quantities order on him at the rates/ prices mentioned in his bid and/or accepted by the owner.

19 LOCAL CONDITIONS

- 19.1 It will be imperative on each bidder to fully inform himself of all local conditions and factors which may have any effect on the execution of the works covered under these documents and specifications. The owner shall not entertain any request for clarifications from the bidders, regarding such local conditions.
- 19.2 It must be understood and agreed that such factors have properly been investigated and considered while submitting the proposals. No claim for financial adjustment to the contract awarded under these specifications and documents will be entertained by the owner. Neither any change in the time schedule of the contract nor any financial adjustments arising thereof shall be permitted by the owner, which are based on the lack of such clear information or its effect on the cost of the works to the bidder.

20 BRAND NAMES:

The specific reference in this specification and documents to any material by trade name, make or catalogue number shall be construed as establishing standard of quality and performance and not as limiting competition. However bidders may offer other similar equipment provided it meets the specified standard, and performance requirements. The bidder shall furnish technical information about the alternative equipment to enable the owner to determine the acceptability of equipment. The owner shall be the sole judge of the acceptability of the alternative equipment.

21 PRELIMINARY EXAMINATION AND EVALUATION:

- 21.1 The Owner will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
- 21.2 Prior to the detailed evaluation, the owner will determine the substantial responsiveness of each bid to the bidding document. For purpose of these clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding document without material deviations. A material deviation is one which affects in any way the prices, quality, quantity or delivery period of the equipment or which limits in any way to the responsibilities or liabilities of the bidder of any right of the owner as required in these specifications and documents. The Owner's determination of a bid's responsiveness shall be based on the contents of the bid itself without recourse to extrinsic evidence.

- 21.3 A bid determined as not substantially responsive will be rejected by the owner and shall not subsequently be treated responsive by the bidder by correction of the non-conformity by the bidder.
- 21.4 The “Price bids” of the bidders whose “Techno- commercial bid” found in order & responsive and meets, the qualification requirements as specified in the bidding documents, only shall be opened.
- 21.5 The owner may waive any minor infirmity or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any bidder.

22 AWARD OF CONTRACT

- 22.1 Notification of award of contract will be made in writing to the successful bidder(s) by the owner.
- 22.2 The contract will be awarded to the best qualified and the substantially responsive bidder offering the lowest evaluated bid in conformity with requirements of these specifications and documents and the owner shall be the sole judge in this regard and subject to the provisions of these instructions to bidders and other terms and conditions detailed out in these documents and specifications. A responsive bid is one which accepts all terms and conditions of these specifications and documents without any major modifications. A major modification is one which affects in any way the prices, quality, quantity or delivery period of the equipment or which limits in any way the responsibilities or liabilities of the bidder or any rights of the owner as required in these specifications and documents. However, the owner may waive any minor formalities or irregularities in the bid.
- 22.3 The contract will be awarded to first lowest responsive bidder after having discussions & negotiations with him, for ascertaining the reasonable price for tendered work. However where the prices quoted / agreed by such first lowest bidder, even after negotiation is considered higher, the competent purchase committee / authority may offer a still lower price, considered reasonable to all qualified participating bidders including first lowest one. On acceptance of such price by one or more bidders, the contract would be awarded to bidder standing lowest among those counter offer prices) as per original comparative statement.
- 22.4 Orders for supply of material(if applicable) and erection work contracts shall be placed on the successful bidders. The contractor shall be fully responsible for the works to be executed under the contract.

23 CONTRACT QUALITY ASSURANCE

23.1 The bidder shall include in his proposal the quality assurance program containing the Overall quality management and procedure which he proposes to follow in the performance of the works during various phases as detailed in relevant clause of the General Technical Conditions and Specification.

23.2 At the time of award of contract, the detailed quality assurance program to be followed for the execution of the contract will be mutually discussed and agreed to and such agreed program shall form a part of the contract.

24 INSURANCE

The bidder's insurance liabilities pertaining to the scope of works are detailed out in clause titled "Insurance" in clause No. 13.0 of "General Conditions of Contract. Bidder's attention is specifically invited to this clauses. Bid price shall include all the cost in pursuance of fulfilling all the insurance liabilities under the contract.

25 MAINTENANCE TOOLS AND TACKLES

The proposal shall include all special tools and tackles required for the operation and maintenance of the equipment in each equipment package. The bidder shall indicate all the above items in the proposal sheets in the form of a schedule giving therein the description and the quantity of each item. The price to be quoted in "H" schedule by the bidder shall include prices of these tools and tackles. These tools and tackles shall be delivered at site along with the last consignment of equipment and in no case earlier than this unless otherwise specified in the Technical Specification.

26 DRAWINGS, TEST CERTIFICATES & GUARANTEED TECHNICAL PARTICULARS (TO BE FURNISHED BY SUCCESSFUL BIDDER IN CASE OF WORK ORDER)

26.1 Dimensional drawings indicating the general and/or detailed constructional features/cross sectional views/ assembling, Schematic arrangement and lay out for the material/ equipment and its erection and commissioning

26.2 Notwithstanding anything contained in sub para (26.1) above, the Bidder may also furnish such drawings which according to him are desirable for the material / equipment offered.

26.3 The purchaser may require the drawings as furnished by the Bidder to be modified to suit the requirements of the specification. The approval of final drawings shall be necessary and binding and the supplies shall conform to the same.

26.4 In case of any specific alternative requirement of type tests the same shall be furnished as per this specification.

26.5 The Bidder/supplier shall be required to furnish the routine/manufacturer(s) factory test certificate(s) for the tests carried out during manufacture in accordance with the latest standard specifications

27 GENERAL

- 27.1 Specification/ Tender document may be downloaded by any of the interested bidder from <http://eproc.rajasthan.gov.in> for the consideration of his tender up to stipulated date & time. However, online tenders will only be considered if the bidder have deposited requisite fee.
- 27.2 The supplier shall treat the details of the specification and other bid documents as private and confidential and they shall not be reproduced without the written authorization of the purchaser.
- 27.3 The purchaser does not bind him to accept the lowest or any bid or any part of the bid and shall not assign any reason(s) for the rejection of any bid or a part thereof.
- 27.4 The fact of submission of bid to the purchaser shall be deemed to constitute a contract between the bidder and purchaser whereby such bid shall remain open for acceptance by the purchaser within the validity period and bidder shall not have any option to withdraw their offer or impair/ derogate the same. Where the bidder is notified about acceptance of their bid by the purchaser during the validity period, they shall be bound by the terms and conditions of various contract documents as per specifications of the bid documents in question until formal contract in this regard, has been executed between them and the purchaser.
- 27.5 The Successful bidder shall have to execute contract documents for the proper fulfillment of the same.
- 27.6 Any action on the part of the bidder to revise the rates/prices on their own after the opening of the bid may result in rejection of the bid and also debar them from submission of bids to the Nigam at least for one year or next bid whichever is later.

28.0 SPECIAL CONDITIONS OF CONTRACT

Following points are to be given personal attention by the bidder as these play vital role in the contract: -

- 28.1. The quantities indicated are only provisional. The actual quantity of material and quantum of work involved shall be based on detailed survey to be conducted by the contractor with Nigam's authorized representative before commencement of the ordered work.
- 28.2 "Time is the essence of agreement". To honour this no time extension will be given in normal condition as the work is to be finished within scheduled time. However extension in work completion time will be considered /granted under force majeure conditions and on account of unforeseen or unavoidable circumstances beyond the control of owner/contractor as specified in this specification. Progress of the work will be examined on pro-rata basis. Priority/ Procedure of the work will be decided by Engineer in-charge.
- 28.3 It is assumed that item and work of minor nature are included in the price quoted. However major item and work if not included in the bid, and if is the demand of work, then contractor will have to provide it.

28.4 Since this is a work on "Turnkey basis", so price should include supply, installation, testing, commissioning and proper maintenance and replacement of item till Performance guarantee period is over. No matter if all above is not narrated with the item, it is presumed that price given by bidder includes all of above work.

29.0 Note:

- 29.1 The bidders are requested to submit their bids prior to last date of submission to avoid Non- submission of their bids up to prescribed date & time due to non-availability / hanging of website at last moments or any reason whatsoever. The last date of submission of bids will not be extended on such accounts.
- 29.2. Furnishing of Earnest Money/Exemption certificate & proof for deposit of Earnest Money, e-tender processing fees & cost of tender documents before techno-commercial bid opening is essential otherwise the techno-commercial bid in electronic form (cover II and III) will not be opened.
- 29.3 (i) The bidder will have to *deposit* prescribed cost of tender specification by DD/Banker's Cheque payable in favour of Accounts Officer (**TW**), **JVVNL, Jaipur**. up to stipulated date & time in the office of the SE(RE), JVVNL, Jaipur
- (ii) The bidder will have to deposit prescribed EMD by DD/Banker's Cheque payable in favour of Accounts Officer (**TW**), **JVVNL, Jaipur** up to stipulated date & time in the office of the SE(RE), JVVNL, Jaipur .
- (iii) The bidder will have to deposit prescribed Processing Fee of Rs.1000/- by DD/Banker's Cheque in favour of **Managing Director, RISL, payable at Jaipur** with the **SE (RE), JVVNL,Jaipur**. up to stipulated date & time in the office of the SE(RE), **JVVNL,Jaipur** .
- (iv) The bidder will furnish bank guarantee, if required as per qualifying requirement , in the office of the **SE (RE), JVVNL, Jaipur**
- 29.4 Discom's reserve the right to accept minor deviation(s) in qualifying requirement and techno - commercial conditions on its merits.
- 29.5 The purchaser will respond in writing to any request for clarification on tender documents which it receives not later than 15 days prior to deadline for submission of tender, after which no correspondence shall be entertained.
- 29.6 The bidders should provide complete information at the time of submission of bid. However, if the bidders are asked to furnish some clarification / confirmation / documents, the bidders are required to furnish the same within specified time failing which; the case shall be finalized /decided on the basis of available information. The responsibility of their bid being ignored on account of delay in furnishing of desired information/documents shall be of the bidder.
- 29.7 All tender documents shall essentially be signed digitally and submitted on <http://eproc.rajasthan.gov.in> in time **as per checklist** provided with the tender document. The checklist along with relevant page nos. shall also be submitted with the tender.

- 29.8 The tender documents can be downloaded from web site [http:// eproc. rajasthan. gov. in](http://eproc.rajabsthan.gov.in). Details of this tender notification can also be seen in NIT exhibited on web site www.jaipurdiscom.com, and are to be submitted online in electronic format **only** on website <http://eproc.rajabsthan.gov.in>.
- 29.9 The bidders who are interested in bidding can download tender documents from <http://eproc.rajabsthan.gov.in> up to the stipulated date & time.
- 29.10 Bidders who wish to participate in this tender enquiry will have to register on <http://eproc.rajabsthan.gov.in> (bidders registered on eproc.rajabsthan.gov.in before 30.09.2011 needs to be registered again). To participate in online tenders, Bidders will have to procure Digital Signature Certificate (Type – II or Type – III) as per Information Technology Act-2000 using which they can sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency or they may contact e-Procurement Cell, Department of IT & C, Government of Rajasthan for further assistance. Bidders who already have a valid Digital Certificate need not procure a new Digital Certificate. Contact No. 0141 – 4022688 (Help desk 10.00 AM to 6.00 PM on all working days) E-mail eproc@rajabsthan.gov.in Address: e-Procurement Cell, RISL, Yojana Bhawan, Tilak Marg, C-Scheme, Jaipur.
- 29.11 Bidder shall submit their offer online in electronic formats both for technical and financial proposals. However, cost of specification and EMD in favour of Senior Accounts Officer (TW), JVVNL, Jaipur up to stipulated date & time in the office of the **SE (RE), JVVNL, Jaipur** and processing fees in the office of **SE (RE), JVVNL, Jaipur**, up to stipulated date & time. The bidder shall upload scanned copies of DDs / acknowledgement of above fee documents along with their online bid.
- 29.12 All the required information shall be furnished strictly in prescribed Schedules/Formats only. Any information indicated other than the prescribed schedules/formats shall not be entertained. The bid shall be evaluated on the basis of information furnished in the prescribed Schedules/Formats.

30.0 GENERAL:

- 30.1 Purchase of a copy of this specification by the bidder is essential for the consideration of his Bid. Only one Bid will be accepted against each copy of the specification purchased. This specification is not transferable. The cost of specification will not be refunded under any circumstances.
- 30.2 The bidder shall treat the details of the specification and other Bid documents as private and confidential and shall not reproduce without the written authorization of the NIGAM.
- 30.3 The NIGAM does not bind itself to accept the lowest or any Bid or any part of the Bid and shall not assign any reason(s) for the rejection of any Bid or a part thereof.
- 30.4 The fact of submission of Bid to the NIGAM shall be deemed to constitute an agreement between the Bidder and NIGAM whereby such Bid shall remain open for acceptance by the NIGAM and Bidder shall not have option to withdraw his offer, impair or derogate the same. If the Bidder is notified during the period of validity of Bid that his Bid is accepted by the NIGAM, he shall be bound by the terms of agreement constituted by his Bid and such acceptance thereof by the NIGAM, until formal contract of the same Bid has been executed between him and the NIGAM in replacement of such agreement.

30.5 The successful Bidder shall have to execute the contract agreement for the proper fulfilment of the contract. In case of ambiguous or contradictory terms and conditions mentioned in the bid, interpretations as may be advantageous to NIGAM may be taken, if satisfactory clarification is not furnished within the prescribed period. NIGAM will not be responsible for any cost or expenses incurred by the bidder in connection with preparation or submission of bids. Telex, Telegraphic, or mailed, Fax, bids shall not be acceptable.

Nigam reserves the right to:

- **Amend the scope of the proposed contract.**
- **Reject or accept any bid.**
- **Cancel the bid process and reject all applications.**
- **Vary the area.**
- **Nigam shall neither be liable for any action nor be under any obligation to inform the bidders of the grounds for any of the above actions.**

ANNEXURE–A (INB-Section-I)**Bid Bank Guarantee (FOR EARNEST MONEY)****(Bank Guarantee in lieu of 80% of earnest money on non-judicial stamp paper worth Rs.100/-)**

Ref : Bank Guarantee No. Dated:

Superintending Engineer (RE)
Jaipur Vidyut Vitran Nigam Limited, Jaipur

1. Whereas[name of the Bidder] (hereinafter called “the Bidder”) has submitted its bid dated[date of submission of bid] for the construction of..... [name of contract] (hereinafter called “the Bid”).

2. KNOW ALL PEOPLE by these presents that WE..... [name of bank] of[name of country], having our registered office at..... [Address of bank] (hereinafter called “the Bank”), are bound unto..... [name of Purchaser] (hereinafter called “the Purchaser”) in the sum of Rs.*_____for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of _____ 200 _____.

3. THE CONDITIONS of this obligation are:

i. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder in the Bid Form; or

ii. If the bidder refuses to accept the correction of error in his Bid ; or

iii. If the Bidder, having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity:

(a) fails or refuses to execute the Contract agreement, if required; or

(b) fails or refuses to furnish the performance security, in accordance with the General Conditions of Contract;

(C) we _____ undertake _____ and authorize our _____ branch _____ situated _____ at Ajmer (Rajasthan) address:

_____to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or all of the three conditions, specifying the occurred condition or conditions.

(d)The decision of the SUPERINTENDING ENGINEER (RE), JAIPUR VIDYUT VITRAN NIGAM LIMITED, JAIPUR shall be final whether breach has been committed on the right to demand the amount of guarantee from us which has accrued to the purchaser.

(e)This guarantee shall not cease or determine, if the purchaser grants time or indulgence or vary the terms of the contract with the contractor or without our consent or knowledge.

(f) The guarantee herein contained shall not be affected by any change in the constitution of the contractor.

(g) We, _____ further undertake not to evoke this guarantee during its currency except with the previous consent of the SUPERINTENDING ENGINEER (RE), JAIPUR VIDYUT VITRAN NIGAM LIMITED, JAIPUR.

(h) All disputes arising under the said guarantee between the Bank and the Nigam or between the Contractor and the Nigam pertaining to the guarantee, shall be subject to the jurisdiction of Courts in Jaipur , Rajasthan alone.

(i) This guarantee will remain in force up to and including one hundred Eighty (120) days after the date of the opening of bids, with a further grace period of Sixty (60) days and any demand in respect thereof should reach the Bank not later than the above date.

Yours faithfully,

Bankers (EXECUTANT)

Witness:-1.

2.

- The Bidder should insert the amount of the guarantee in words and figures denominated in the currency of bid.

SECTION – II

GENERAL CONDITIONS OF CONTRACT & COMMERCIAL TERMS & CONDITIONS

The Terms and Conditions of the contract shall prevail and shall be binding on the Agency and any change or variation expressed or impressed howsoever made shall be in operative unless expressly sanctioned by the Nigam. The Agency shall be deemed to have fully informed himself and to have specific knowledge of the provisions under terms and Conditions of this specification mentioned hereunder:

1.0 DEFINITION OF TERMS:

- 1.1 In constructing these general conditions and the annexed specification, the following words shall have the meaning herein assigned to them unless there is anything in the subject or context inconsistent with such construction.
- 1.2 The "Purchaser" shall mean the JAIPURVIDYUT VITRAN NIGAM LTD represented by Managing Director and shall include their legal personnel, representative, successors and assignees. The "Nigam" or "Customer" or "Owner" shall mean the "Purchaser".
- 1.3 The "Bidder" shall mean and include one or more persons or any firm or any Company or Body incorporate who has submitted the Bid in response to "Invitation To Bid" / "Tender Notice".
- 1.4 The "Contractor" or "Supplier" shall mean the Bidder / Tenderer whose Bid / Tender has been accepted by the NIGAM and shall include the Bidder's heirs, legal representative, successors and assignees approved by the NIGAM.
- 1.5 The "Sub-contractor" shall mean the firm or the persons named in the contract for any part of the work or any person to whom any part of the contract has been sublet with the consent in writing of the NIGAM and shall include his heirs, legal representative, successors and assignees approved by the NIGAM.
- 1.6 The "Chairman" shall mean the Chairman, DISCOM's and "MD" shall mean Managing Director, JAIPURVIDYUT VITRAN NIGAM LTD, Jaipur.
- 1.7 The "Engineer" shall mean the Chief Engineer or other Engineer or officer for the time being or from time to time duly authorized and appointed in writing by the NIGAM to act as Engineer or Inspector for the purpose of the contract. In case where no such Engineer has been so appointed, the word "Engineer" shall mean the NIGAM or his duly authorized representative.
- 1.8 "Plant", "Equipment", "Materials", "Stores", "Works", shall mean and include the plant and materials to be provided and work or works to be done by the Contractor under the

Contract.

1.9 The contract shall mean and include the following:

1. Invitation of Bid.
2. Instructions to Bidders.
3. Bid Form including schedule of prices.
4. Cost of Tender Specification and Earnest money receipt/security guarantee.
5. Letter of Intent and its acknowledgement.
6. Composite Bank Guarantee for security and performance /obligations.
7. Formal work order.
8. Guaranteed test performance and Warranty.
9. General Conditions of Contract.
10. Erection Conditions of Contract.
11. Special instructions.
12. General Technical Conditions and specification.
13. Site conditions.
14. Specification, specific conditions, schedules and drawings.
15. Addenda which may hereafter be issued by the NIGAM, to the Contractor in the form of letter and covering letters and schedule of prices as agreed between the Contractor and the NIGAM.
16. The Agreement to be entered into under Clause 5 of this section.

1.10 The "Specification" shall mean the specification, specific conditions annexed to the General Conditions of Contract and the schedules thereto, if any.

1.11 The month shall mean, English calendar month i.e. period of 30 days and week shall mean a period of 7 days.

1.12 The "Site" shall mean the place or places named in the Contract and include, where applicable, the lands and buildings upon or in which the works are to be executed.

1.13 The "Place of delivery" shall mean the place of delivery at which the Contractor/Supplier is responsible to deliver the materials at the contract price.

1.14 The "Test of completion" shall mean such tests as are prescribed in the contract to be made by the Contractor before the Plant is taken over by the NIGAM as per the General Conditions.

1.15 "Commissioning" shall mean the satisfactory operation of the plant or equipment specified herein, after all necessary initial checks, adjustments, trials, cleaning and re-assembly required at site, if any, have been completed and the plant has been in continuous and unrestricted commercial use specified for at least thirty (30) days or as otherwise.

1.16 "Letter of Intent" shall mean the NIGAM's letter conveying his acceptance of the Bid subject to such reservations as may have been stated therein.

1.17 The "Contract price" shall mean the sum named in or calculated in accordance with the provisions of the Contract/purchase or any amendments thereto.

1.18 "Formal work order" shall mean the Owner's letter which may be issued in the way of letter of intent containing detailed terms and conditions of the work/supply and such other particulars which the owner may like to convey the Contractor/supplier pending execution of a formal written agreement in accordance with clause 5.0 of this section.

- 1.19 The Consignee shall mean and include the Beneficiary/ Assistant Controller of Stores / Store Superintendents and or any other officer of JVVNL/JdVVNL/AVVNL/, performing the duties of the consignee.
- 1.20 "Commercial Use" shall mean that use of the work which contract contemplates or which it is to be commercially capable.
- 1.21 "Writing" Shall include any manuscript, type written or printed statement under or over signature or seal as the case may be.
- 1.22 The Word "Codes" shall mean the Indian Boiler Regulation and rules made there under with such special modifications which may be agreed upon by the Chief Inspector of Boilers, Rajasthan from time to time which shall also include the Indian Electricity Rules, IS Code of practice and Factory Rules and Regulations applicable in the State of Rajasthan on the date of issue of the letter of intent or such modifications thereof as may be specially stipulated by competent State authorities i.e. Electrical Inspector and Chief Inspector of Factories, Rajasthan.
- 1.23 Words importing "PERSON" shall include firms, companies, corporation and other bodies whether incorporated or not.
- 1.24 Words importing the singular only shall also include the plural and vice versa where the context requires.
- 1.25 Terms and expressions not herein defined shall have the same meaning as one assigned to them in the Indian Sale of Goods Act (No.III of 1930), fulfilling that in the Indian Contract Act (Act IX of 1872) and falling that in the General clauses Act 1897 including amendments thereto.
- 1.26 When the words "approved", "subject to approval", "satisfactory", "Equal to", "proper", "Requested", "as directed", "where directed", "when directed", "determined by", "accepted", "permitted" or words and phrases of like importance are used, the approval, judgment, direction etc. is understood to be a function of the owner/engineer.\
- 1.27 'Works', shall mean and include the supplying of equipment, labour and services, as per the technical specifications and complete erection, testing and commissioning of the equipment including all transportation, handling, unloading and storage at the site as defined in the contract, intended to be executed on a supply and erection basis.
- 1.28 The term 'Equipment Portion' of the contract price shall mean the all adjusted F.O.R. destination value of the equipment.
- 1.29 The term 'Erection Portion' of the Contract Price shall mean the value of field activities of the Contract including erection, testing and commissioning to be performed at site by the Contractor
- 1.30 'Inspector' shall mean the Owner or any person nominated by the Owner from time to time, to inspect the equipment, stores or works under the Contract, and/or the duly authorized representative of the Owner.
- 1.31 'Date of Contract' shall mean the date on which both the parties have signed the Contract Agreement.

- 1.32 'Start-Up' shall mean the time period required to bring the equipment covered under the Contract from an inactive condition, when construction is essentially complete, to the state ready for trial operation. The start-up period shall include preliminary inspection and checkout of equipment and supporting sub-systems; initial operation of the complete equipment covered under the Contract to obtain necessary pre trial operation data, perform calibration and corrective action; shut down, inspection and adjustment prior to the trial operation period.
- 1.33 'Initial Operation' shall mean the first integral operation of the complete equipment covered under the Contract with sub systems and supporting equipment in service or available for service.
- 1.34 'Trial Operation' 'Reliability Test', 'Trial run', "Completion Test", shall mean the extended period of time after the start-up period. During this trial operation period the equipment shall be operated over the full load range. The length of trial operation shall be as determined by the engineer, unless otherwise specified elsewhere in the contract.
- 1.35 'Performance and Guarantee Test', shall mean all operational checks and tests required to determine and demonstrate capacity, efficiency, and operating characteristic as specified in the contract documents.
- 1.36 The term 'Final acceptance' shall mean the owner's written acceptance of the works performed under the contract, after successful completion of performance and guarantee Tests.
- 1.37 'Guarantee Period/ Maintenance period' shall mean the period during which the contractor shall remain liable for repair or replacement of any defective part of the works performed under the contract.
- 1.38 'Drawings'/ 'Plans' shall mean all:
- Drawing furnished by the owner/ consultant as a basis for proposals. Supplementary drawings furnished by the owner/consultant to clarify and to define in greater detail intent of the contract.
- Drawing submitted by the contractor with his proposal provided such drawings are acceptable to the owner/consultant. Drawings furnished by the Owner/Consultant to the Contractor during the progress of the work ; and Engineering data and drawings submitted by the contractor during the progress of the work provided such drawings are acceptable to the engineer.

2.0 CONTRACT:

The Contractor and the Nigam shall as soon as possible, unless otherwise agreed upon enter into a signed agreement for the proper fulfillment of the contract. The expenses of completing and stamping the agreement shall be paid by the contractor and the Nigam shall be furnished free of charge with an executed stamped counterpart of the agreement with three copies after the tender / bid has been accepted by the purchaser / owner. All orders/instructions to the contractor shall except as herein otherwise provided, be given by the engineer on behalf of the purchaser/owner.

2.1 PERFORMANCE PERIOD:

- 2.1.1 The performance period of the contract shall be **60 months from the date of Commission of the project in totality**. The guarantee period of material used & the performance of workmanship of work done shall be safeguard through BG's detailed in clause 3.0 hereunder.
- 2.1.2 The contract for awarded work may be rescinded at any time if the performance regarding achievement of the objective and scope of works as illustrated under Section-IV of this specification is not found satisfactory [no compensation will be paid] or the agency breach any of the terms and conditions, or the agency will be advised for improvement.

2.2 SCOPE OF CONTRACT:

- 2.2.1 The scope of the contract including the design manufacture, supply and erection inter- alia including testing & commissioning of the work / equipment in accordance with the specification and documents at the proposed site of the work.
- 2.2.2 The General terms and conditions mentioned herein shall form a part of the specification and documents.
- 2.2.3 All the works covered by the contract shall be in accordance with the Indian Electricity Act 2003 with the latest amendments and the Indian Electricity rules 1956 made there under.

3.0 BANK GUARANTEE /DEPOSIT:

- A. **3.1 (a) Mobilization B.G.:-** The contractor may opt for mobilization advance of 20% of the ordered value upon furnishing of Bank Guarantee of equivalent amount valid till date of commissioning as mentioned in the work order with additional claim period of six month (Anex---).
- (b) **Security Bank Guarantee (SBG) :-** shall be deposited by the successful bidder either in the form of in cash or by crossed Bank Draft or by way of Bank Guarantee from a nationalized / scheduled bank equivalent to 5 % of the value of work order . The SBG shall be valid till six month from the date of issue with further claim of three months, and required to be extended as deemed necessary.
- B. (c) **Performance Bank Guarantee :-** 90% payment shall be released against supply, erection, testing and commissioning of minimum of 100 solar pump sets by adjusting proportionate mobilization advance if any. Balance 10 % payment shall be released after expiry of guarantee period (60 month). This balance 10 % may be released against **Performance Bank Guarantee (PBG)** of equivalent value from a Nationalized Bank. The validity of this PBG shall be for 5 years from the date of commissioning of system, initial validity for minimum two years with six month grace period.

3.2 GUARANTEE OF MAJOR EQUIPMENTS

- (a) The contractor shall guarantee amongst other things, the following:
 - (i) Quality and strength of the material(s) used together with the workmanship and finish corresponding to the most modern practice(s).
 - (ii) Safe electrical and mechanical stresses on all parts of the equipment under all specified conditions of operation.

 - (i) Performance figures in respect of the guaranteed technical particulars as finally agreed upon.
 - (ii) Satisfactory performance of materials/Equipment supplied by the contractor during the Guarantee period.

- (b) A manufacturer's Guarantee on the Rajasthan State Non judicial stamp paper of Rs. 100.00 in the Performa prescribed **Annexure-C (GCC)**. Such Guarantee shall be attested either by a first class Magistrate or by Notary Public.

4.0 CONTRACTOR TO INFORM HIMSELF FULLY

The Contract shall be considered to have come into force from the date of the issue of Letter of Intent / Letter of Award. The contractor shall be deemed to have carefully examined the General Conditions, specifications, schedules and drawings also to have satisfied himself as the nature and character of the work to be executed and where necessary, of the site conditions and other relevant matters and details. Any information thus had or otherwise obtained from the owner or the Engineer shall not be in any way relieve the contractor from his responsibility for the supplying of the plant and equipment and executing the work in terms of the contract including all details and incidental works and supply all accessories or apparatus which may not have been specifically mentioned in the contract but necessary for ensuring complete erection & commissioning and safe and efficient working of the plant and equipment if he has any doubt as to the meaning of any portion of the general and any special conditions of contract and specifications, he shall before offering his bid proposal, set- forth the particulars thereof and submit them to the Engineer in writing in order that such doubt, misunderstanding, misconceptions, whatsoever could be allied.

5.0 CONTRACT DOCUMENTS AND AGREEMENTS

- 5.1** The order placed under this specification shall be governed by the terms and conditions as incorporated in this Specification and as given in the detailed work order and its annexure(s). The terms and conditions as specified in this section if differ from the terms indicated in the detailed work order and its annexure(s) the latter shall prevail. The contract shall for all purposes be construed according to the Laws of India and subject to jurisdiction of Rajasthan Courts only. For the due fulfillment of the contract, the contractor shall execute an agreement in the prescribed form **Annexure-“C”** on Rajasthan State Non- judicial stamp paper bearing stamp duty as applicable. The expenses of completing and stamping the contract agreement shall be borne by the Contractor. Such agreement shall be executed and signed by the authorized representative of the contractor on each page thereof. The original copy is only to be executed on the stamp paper. The remaining Two copies may be executed on simple paper. Such complete agreement form along-with the contract documents together with a 'Power of Attorney' in favour of the Executants shall be required to be returned to the owner within a period of 15 days from the receipt of order duly signed on each page.

One copy of the executed agreement duly signed by the purchaser/owner shall be sent to the contractor for his reference. The contract documents shall mean and include the following:

1. Contract agreement along with letter of Intent.
2. Work order and its Annexure.
3. Instructions to bidders (SECTION-I)
4. General Conditions of Contract & other Terms & conditions (Section-II)
5. Pre-Qualification Requirement- SECTION-III
6. Technical Specification- SECTION-V

7. Bid proposal form and its schedules including price schedule and completion schedules.
10. Power of Attorney in favour of the signatory.

5.2 ACCEPTANCE OF CONTRACT:

The successful bidder will forward three sets of letter of award, Two of which will be signed (each page) by him/his authorized representative in token of his accepting the contract and returned to the authority placing the order within 15 days of its issue, failing which, his EMD is liable to be forfeited.

5.3 FAILURE TO EXECUTE THE CONTRACT:

Contractor failing to execute the order placed on them to the satisfaction of the NIGAM under terms and conditions set forth therein, will be liable to make good the loss sustained by the NIGAM. This is without prejudice to the imposition of penalty and forfeiture of any available financial holds.

5.4 EFFECTING RECOVERIES:

Any loss, arising due to non-fulfilment of this contract or any other contract, will be recovered from the Security Deposit held and or any other amount due to the agency from this Contract as well as from other contracts.

6.0 GRAFTS AND COMMISSIONS ETC:

Any graft, commission, gift or advantage given, promised or offered by or on behalf of the contractor or his partner, agent, officers, director, employee or servant or any one on his or their behalf in relation to the obtaining or to the execution of this or any other contract with the owner, shall be, in addition to any criminal liability which it may incur, subject of any loss or damage to the owner resulting from any cancellation. The owner

shall then be entitled to deduct the amount so payable from any moneys otherwise due to the contractor under the contract.

7.0 RULES & REGULATIONS:

7.1 The job shall be carried out as per the rules, regulations and other details as prevailed in Nigam. These rules and regulations may be

modified by Nigam from time to time and would be intimated to the Agency.

7.2 The Agency will also follow the labour regulations and the directions of Government and other authorities enforcing the regulations and comply with any other relevant legislation in force from time to time.

8.0 **COMPLIANCE OF LABOUR LAGISLATION:**

The bidder shall discharge its liability of employer/ contractor in respect of personnel to be engaged for service, as said out in EPF and MP Act, 1952 ESI Act, 1948 (in ESI implemented area), workmen's compensation act, 1923 (in non ESI implemented area) contract labour (R&A) Act, 1970, Payment of Wages Act, 1936, Minimum Wags Act, 1948 etc. The bidder is required to get separate code under the provision of EPF and ESI Acts, if not already taken and deposit the employer's contribution along with employee subscription, as per rule and submit copy of challans at the time of claiming payment, as per clause 28, failing which an amount equivalent to employer's contribution and employees subscription shall be deducted from his each bill and deposited with the concerned authorities. The bidFder shall be solely responsible for any consequences arising out of breach of any legislation.

9.0 **ELECTRICITY RULES AND REGISTRATION:**

9.1 All works shall be carried out in accordance with the latest provisions of the Indian Electricity Act/Electricity Supply act and Indian Electricity Rules and the rules made there under applicable in the State of Rajasthan on the date of letter of intent with such special modification thereof as may be specially stipulated by competent State Authorities i.e. The Chief Electrical Inspector of Rajasthan.

10.0 **SAFETY OF SYSTEM:**

The Agency shall be fully responsible for upkeep and safety of existing electric system. Agency shall make well aware to NIGAM any loss suffered due to default of the agency in this respect.

11.0 INSURANCE:

- (i) The agency at his cost shall arrange, secure and maintain all insurance as may be pertinent to the works and obligatory in terms of law to protect its interest and interest of the NIGAM against all perils detailed herein. The form and the limit of such insurance as defined herein together with the under-writer in each case shall be acceptable to the NIGAM. However, irrespective of such acceptance, the responsibility to maintain adequate insurance coverage at all time during the period of contract shall be of agency alone. The agency's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations. The insurance covers to be taken by the agency shall be in a joint name of the NIGAM and the agency. The agency shall, however, be authorized to deal directly with Insurance Company or companies and shall be responsible in regard to maintain of all insurance covers. Further the insurance should be in freely convertible currency.
- (ii) The agency shall obtain accident liability insurance for its employees for payment of compensation on account of injury, fatal or otherwise due to accident during course of operation carried out by him for the purpose of complying with his contractual obligations thereof. It shall indemnify NIGAM against any claim from such employees or damage to property what- so- ever while these arise out of or in consequences of the execution of works, operation and all activities to be performed till the successful completion of contract shall be to the account of the agency. The agency shall be responsible for preference of all claims and make good the damages or loss by way of repairs and/or replacement of the equipment, damaged or lost. The transfer to title shall not in any way relieve the agency of the above responsibilities during the period of contract. The agency shall provide the NIGAM with copy of all insurance policies and documents taken out by him in pursuance of the contract. Such copies of documents shall be submitted to the NIGAM immediately after such insurance coverage. The agency shall also inform the NIGAM in writing at least sixty (60) days in advance regarding the expiry/cancellation and/or change in any of such documents and ensure revalidation, renewal etc., as may be necessary well in time.

- (iii) All costs on account of insurance liabilities covered under the contract will be on agency's account and will be included in contract price. However, the NIGAM may from time to time during the pending of the contract, ask the agency in writing to limit the insurance coverage, risks and in such cases, the parties to the contract will agree for a mutual settlement, for reduction in contract price to the extent of reduced premium amount. The agency, while arranging the insurance, shall ensure to obtain all discounts on premium, which may be available for higher volume or for reasons of financing arrangement of the project.
- (iv) The Clause entitled 'Insurance' under this section covers the additional insurance requirements for the portion of the works to be performed at the site.
- (v) The agency shall take necessary insurance against loss, damage, fire, accidents and damages occasioned by the agency in the course of operation carried out by him for the purpose of complying with his contractual obligations thereof.
- (vi) The insurance as per clause 13.1 & 13.2 shall be in the joint names of the NIGAM and the agency so that the NIGAM and the agency are covered for the entire period of contract from the commencement of the contract and shall remain valid up to 30 days from the date of handing over all the works completed in all respects to the Superintending Engineer (RE).
- (vii) It will be the responsibility of the agency to lodge, pursue and settle all claims (for all the equipment and materials including items provided by NIGAM) with the insurance company in case of any damage, loss, or fire and the JVVNL shall be kept informed about it. The losses, if any, will have to be borne by the agency if the claims are not lodged and pursued properly in time or if the insurance company does not settle the same.
- (viii) The agency shall replace the lost/-damaged materials promptly irrespective of settlement of the claims by the underwriters and ensure the work progresses as per the agreed schedule(s).

(ix) The agency shall also ensure the following: -

- The insurance should be valid from the date of start of work and shall remain valid up to 60 month from the date of handing over of the work to the beneficiary.
- Insurance policy shall be in joint name of NIGAM and agency.
- The agency shall furnish computerized and stamped insurance policy. Insurance cover shall not be acceptable.
- A copy of insurance policy shall invariably be furnished to the Superintending Engineer (RE), Jaipur.

(x) **THIRD PARTY INSURANCE:**

The agency shall if and so far as the contract provides indemnify the Nigam against all losses and claims in respect of injury or damage to property what- so- ever while these arise out of or in consequences of the execution of works and against all claims proceedings, damages, costs, charges, expenses what- so- ever in respect of or in relation thereto. Accordingly the agency shall before commencement of execution of the works insure against his liability for material or physical damage, loss or injury which may occur to property including that of the Nigam, or to any person including any employee of the Nigam, by or arising.

(xi) **REMEDY ON AGENCIES FAILURE TO INSURANCE:**

If the Agency shall fail to effect and keep in force insurance referred to in clause 13 (i) to 13 (ii) hereof or any other insurance which he may be required to effect under the terms of contract then the Nigam may effect and keep in force any such insurance and pay such premium(s) as may be necessary for that purpose and from time to time deduct the amount so paid by the Nigam as aforesaid from any money due or which may become due to the Agency or recover the same as debt from the Agency.

12.0 LIABILITY FOR ACCIDENTS AND DAMAGES:

- (i) The Agency shall be liable for and shall indemnify the NIGAM in respect of all injury to person or damage to property resulting from the negligence of the Agency or his workman or from defective work but not from any other cause.
- (ii) Provided that the Agency shall not be liable for any loss or profit or loss of Contract or any other claim made against the NIGAM not already provided for in the contract, not for any injury or damage caused by or arising from the acts of the NIGAM or of any other person or due to circumstances over which the

agency has no control, not shall his total liability for loss, damage or injury under this clause exceed the total value of the Contract.

- (iii) The Agency will indemnify and save harmless the NIGAM against all actions, suits, claims, demands, costs, or expenses arising in connection with injuries (other than such as may be attributable to the NIGAM or his employees) suffered prior to the date when the work shall have been taken over hereof by persons employed by the agency on the work, whether at common law or under the workman's compensation Act-1923 or any other statute in force at the date of contract relating to the question of the liability of employees for injuries suffered by employees and will if called upon to do so take out the necessary policy or policies of insurances to over such indemnity.
- (iv) The agency shall insure against such liabilities with an insurer approved by the Engineer and shall continue such insurance, during the whole of the time that any person(s) are employed by him on the works and shall when required produce to the Superintending Engineer (RE), Jaipur. Such policy of insurance and the receipt for payment of the current premium.

13.0 MAINTENANCE OF FACILITIES AND PERSONNEL:

13.1 FACILITY:

13.1.1 The Agency shall maintain all requisite facilities, T&P etc. of its own as required to carry out the work as per the specification.

13.1.2 The Agency shall provide and maintain a controlling office in the town for which work has been awarded for early execution of work.

13.1.3 The agency shall also maintain communication equipments like telephone with fax, mobile phone, Internet etc. for interaction with NIGAM and others.

13.2 PERSONNEL:

13.2.1 The Agency shall maintain supervisory and other personnel for efficient management of the work under contract.

Officer-In-Charge	To have adequate experience and vision to take charge of the entire project and resolve problems so as to evolve an ideal system.
Skilled & un-skilled workers	Sufficient manpower to achieve the targeted work in the time frame allowed with proper safety.
Office Staff	Sufficient manpower to achieve minimum guaranteed performance.

13.2.2 Person in-charge or an alternate shall be available for communication during all business hours.

13.2.3 Agency shall not change the office in charge / nodal officer, frequently.

13.2.4 The Agency shall furnish documents regarding the experience of the key personnel proposed to be employed by him. NIGAM has right to verify the above at any time.

13.3 **NODAL OFFICER:**

To interact between the field offices and agency, the concerned Superintending Engineer (RE), JVVNL, will be the Nodal Officer of the project work and CE(Projects) will be the overall in- charge for smooth implementation of the scheme.

14 **ENGINEER INCHARGE & SUPERVISORY OFFICERS:**

The Executive Engineer (SPP) of dedicated cell will be the Engineer In charge for execution of the contract and the concerned Assistant Engineer (O & M) shall be authorized to inspect the work carried out by the agency.

15.0 **GUARANTEE OF MATERIAL USED:**

In case of any defects is observed in the material used by the contractor during the guarantee period, then he has to replace the defective material free of cost within a period of 72 hrs., in case if contractor fails to replace the defective material then the work shall be got done by the NIGAM & the available financial holds shall be withhold / fore-fitted without any further notice / correspondences.

16.0 AGENCIES RIGHTS:

The agency will be given rights to work in the area during the agreement period for carrying out the project work.

17.0 FALL BACK ARRANGMENT:

Provision shall be made in the agreement that in the event of failure of the Agency to fulfil its obligations, duties and responsibilities as per the agreement terms, NIGAM shall inter-alia have the right, at any time to resort to fall back arrangement. Under this plan, NIGAM shall take charge of all facilities and systems whether in operation or under execution after giving suitable notice as provided in the agreement and can recover from the security deposit the losses suffered due to such failure. If the security deposit is insufficient, the Agency shall pay the difference to NIGAM failing which NIGAM shall have right to recover the sum through legal or other means.

The NIGAM shall have the right in such circumstances to manage the system itself after taking charge of the facilities as above or through any other agency as it may deem fit and no claim of Agency for compensation in this respect shall be entered.

18.0 GST is applicable as per norms.

19.0 GOVERNING LAWS AND JURISDICTION:

The Indian Law shall govern the agreement. Only appropriate courts in JAIPUR shall have exclusive Court Jurisdiction to deal with any matter arising out of or relating to the agreement or otherwise.

20.0 JURISDICTION FOR LEGAL PROCEEDINGS:

The contract shall be governed by the laws of India for the time being in force and be subject to the court of competent jurisdiction at JAIPUR (RAJASTHAN). All disputes, differences questions whatsoever arising between the NIGAM and the agency upon or in relation to or in connection with the contracts shall be deemed to have arisen at JAIPUR only and no court other than the court of JAIPUR(Rajasthan) shall have jurisdiction to entertain or try the same.

21.0 SETTLEMENT OF DISPUTES:

All dispute / difference / question what so ever which may arise between the NIGAM and the agency, the same shall be decided by the Chairman Discom`s / Managing Director, JVVNL, JAIPUR or by the settlement committee constituted by him and shall be final and binding on both the parties.

The NIGAM has constituted settlement committee to settle the disputed cases. For the disputed amount up to Rs. 2.5 Lac the case may be referred to the CE level settlement committee and if the disputed amount is more than Rs. 2.5 Lac the case shall be referred to the corporate level settlement committee. The non refundable fees for referring the case to the settlement committee are as given below:

- i) Reference fee for CE level settlement committee - Rs.1000/-
- ii) Reference fee for Nigam level settlement committee -Rs.3000/-
and Appeal against CE level committee
- iii) Fee for review of Decision of Nigam level settlement committee - Rs.5000/-
by BOD

The settlement committee fees as shown above or prevailing at that time shall be deposited in cash with the respective circle Accounts Officer (O&M), JVVNL and shall furnish receipt thereof with a request for referring their disputes to the settlement committee for decision.

22. CONDUCT OF AGENCIES STAFF:

If any of the Agency's employees shall in the opinion of NIGAM is guilty of any misconduct or incompetence or negligence, and then if so directed by NIGAM, the Agency shall at once remove such employee and replace him by a qualified and competent substitute.

23. LIEN:

In case of any lien or claim pertaining to the work and responsibility of the agency for which NIGAM might become liable, it shall have right to recover such claim amount from the agency.

24. COMPLETION OF WORK:

Entire work of supply, erection, commissioning and its handing over is to be completed within **forty five days (including commencement period)** from the date of issue of work order and handing over the list of beneficiaries.

25.0 DELAY IN EXECUTION / COMPLETION OF WORK AFTER THE SCHEDULE DATE:

- 25.1 The time and the date of delivery / completion period specified in the work order shall be deemed to be the essence of the contract and the works shall have to be completed not later than the period specified therein. Should the contractor fail to complete the work on order or any part thereof within the specified completion period, the owner shall be entitled at his option.
- 25.2 To affect recovery for delay in execution of works in the prescribed time limits as above, a penalty shall be imposed @0.25% per week or part thereof for 1st 4 weeks & there after @ 0.5% per week or part thereof subject to Max. 10% of Balance Contract Value. Progress of completion of ordered works and corresponding delay shall be accounted for on cumulative basis in the manner specified in work completion schedule. The Balance Contract Value shall be determined by the following formula:-

Total Contract Value – Value of Total Bills submitted to Sr. A.O (CPC) on the date of contractual completion Period.

- 25.3 To cancel the contract or part thereof and if so desired, to get the work completed/ executed at the risk and cost of contractor.
- 25.4 Any financial liability arising from and consequent upon the failure of the contractor to adhere to the stipulated completion schedule shall be to the contractor's account.
- 25.5 Adjustment in regard to the amount recoverable if any shall be made from the cash deposits or from the firms dues of by operating the bank guarantee(s) as may be available with Nigam and/or in any other manner as may be deemed appropriate by the purchaser.

26. FORCE MAJURE:

- 26.1 If at any time during the continuance of the contract the progress in whole or in part is prevented or delayed by reason of any war, hostility, acts of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restrictions, strikes, lockouts or any acts of Gods (herein after referred to as events), then provided, a notice and adequate proof of production/ dispatch/ execution having suffered on account of these events, is given within 21 days from the day of occurrence thereof, the provisions of sub para of this clause shall not be invoked by

the owner, provided further that the execution under the contract shall be resumed, as soon as practicable after such event(s) has/ have ceased to exist and the decision of the owner as to whether execution so resumed or not,

shall be final and conclusive, provided further that in case the strike/lockout prolongs beyond a period of 30 days the contractor shall immediately inform about it to the owner, in which case the owner reserves the right to procure the material /equipment/ get the work on order or part thereof executed from any other source at the risk and cost of the contractor.

- 26.2 Non availability/ scarcity/ non-allocation of raw material shall not constitute as a force majeure condition ' in any case and it will be sole responsibility of the contractor to arrange the raw material for timely execution of the order.
- 26.3 The delay in execution due to unforeseen and unavoidable reasons and the circumstances beyond the control of contractor/owner leading to delay in execution may also form force majeure conditions.

27.0 INSPECTIONS AND TESTING:**27.1 Inspection & testing of material:**

- 27.1.1 The inspection offer is to be given to SE (RE). The inspection shall be carried by officer of Discoms/independent agency nominated by SE(RE) at the manufacturing Firm's work / Nigam's store.
- (a) The Bidder shall state in his Bid the places of manufacture, testing and inspection of various equipment offered by him. Unless specifically provided otherwise all tests shall be carried out at the Contractor's works before shipment.
- (b) The contractor shall intimate at-least 15 days in advance through notice(s) about the readiness of material for dispatch commensurate with specific delivery schedule, so as to enable the owner to depute his representative for Inspection, Testing & Checking of the material / equipment. For this purpose the date of receipt of the letter in the office of the work order placing authority shall be deemed as the date of call for inspection and not the date mentioned in the letter or the date of dispatch. In case material / equipment is not found ready by the representative of the owner deputed for inspection to the extent of the quantity indicated in the inspection call with tolerance of (-) 10% or if the inspection is not got carried out by any reason(s) attributed to the contractor an amount of Rs.7500/- only for the contractor's work located in the State of Rajasthan and an amount of Rs.15,000/- for the contractor's works located outside the State of Rajasthan will become payable by the contractor on this account to the Accounts Officer (TW), JVVNL, Jaipur. Further, in cases where traveling by air is involved the inspection charges will be recovered on actual basis. The contractor will deposit the amount with the Accounts Officer (TW), JVVNL, Jaipur immediately under intimation to the work order placing authority, failing which the subsequent call for inspection shall not be entertained.
- (c) **Packing:-** The material/equipment shall be offered duly packed so as to enable the inspecting Officer to seal the inspected / cleared material for identification. The supplier/ contractor shall provide such packing of the goods as is required to prevent their damages or deterioration during transit to their final destination as indicated in the contract. The packing shall be sufficient to withstand without limitation rough handling during transit to their final destination as indicated in the contract. The packing shall be sufficient to withstand without limitation rough handling during transit and exposure to extreme temperature, salt and precipitation during transport and open storage. Packing case size and weights shall be taken into consideration where appropriate keeping in view, remoteness of the good's final destination and absence of heavy mechanized handling facilities at all points in transit as well as at the destination. The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract or in any subsequent instructions imparted by the owner.

- (d) The Owner reserves to himself the right of having any inspection or special test of a reasonable nature at contractor's premises or at sites, in addition to those prescribed in applicable standards and the enclosed technical specification.
- (e) When the tests have been satisfactorily completed at the Contractor's or sub-contractors works the Engineer shall issue a certificate to that effect but if the tests were not witnessed by the Engineer or his representative, the certificate would be issued after the receipt of test certificate by the Engineer, No equipment shall be shipped / dispatched before such a certificate has been issued.
- (f) The authorized representative of the owner shall have at all reasonable times access to the works and premises of the contractor and / or his associates, if any, and shall be free to inspect the works, examine & test the product(s) including raw materials used and the workmanship employed during / after manufacture.
- (g) The contractor shall also furnish the latest calibration certificate(s) of the testing instruments / equipments used for the testing of the materials / equipments as covered in the owner order, to the inspecting Officer. The testing instruments / machines should be got calibrated by the contractor from time to time from the Manufacturer of the testing instruments or any Govt. recognized testing laboratory. The calibration certificate(s) should not, in any case, be older than one year at the time of presenting the same to the inspecting Officer. In case the contractor fails to comply with the conditions as aforesaid, a certificate in writing of the inspector / representative of the Owner that the contractor has failed to provide the facilities shall be conclusive.
- (h) Unless the inspection is specifically waived, no material shall be dispatched without inspection and clearance for dispatch by the owner's representative.
- (i) The owner reserves the right to reject all or any part of the material being manufactured or awaiting dispatch, due to any defect or deviations from the standard specifications prescribed, as observed during the inspection. In case of any dispute / difference in this regard the decision of the Superintending Engineer (RE) shall be final and binding.
- (j) The owner also reserves the right to get the material / equipment tested in any recognized Government Laboratory & claiming any compensation or rejecting the material/ equipment, if not found in accordance with the specification. All charges whatsoever consequent to such rejection and replacement / rectification shall be borne by the contractor.

27.1.2 TYPE TEST CERTIFICATES:-

- (a) Bidder should have test certificate for tendered modal of solar water pumping system from a MNRE authorized testing center at time of bidding. Test certificate should have been issued on or after 1st January 2014.
- (b) In case of any specific alternative requirement of type tests, the same shall be furnished as per Technical specification.

- (c) The Bid not accompanied with the test certificates in terms of para(a) above, are liable to be ignored.
- (d) The contractor shall be required to furnish the routine/manufacturer(s) factory test certificate(s) for the tests carried out during manufacture in accordance with the relevant standard specifications.

28 **Random checking of workmanship of work going on:-**

The owner or his representative shall on giving seven days notice in writing to the agency setting out any grounds of objections which he may have in respect of the work, be at liberty to reject all or any part of the remaining work and all or any workmanship connected with such work which in his opinion are not in accordance with the contract or are in his opinion defective with reasons. In case of any dispute / difference in this regard the decision of the Superintending Engineer (RE), JVVNL shall be final and binding.

29.0 CONTRACTOR'S DEFAULT:-

29.1 If the contractor shall neglect to execute the works with the diligence and expedition or shall refuse or neglect to comply with any reasonable orders given to him, in writing by the engineer in connection with the works or shall contravenes the provisions of the contract, the owner may give notice in writing to the contractor make good the failure, neglect or contravention complained of. Should the contractor fail to comply with the notice within thirty (30) days from the date of service thereof, then and in such case the owner shall be at liberty to employ other workmen and forthwith execute such part of the works as the contractor may have neglected to do or if the owner shall think fit, it shall be lawful for him without prejudice to any other right he may have under the contract, to take the works wholly or in part out of the contractor's hands and re-contract with any other person or persons complete the works or any part thereof and in that event the owner shall have free use of all contractor's equipment that may have been at the time on the site in connection with the works without being responsible to the contractor over the same, and the owner shall be entitled to retain and apply any balance which may be necessary, the payment of the cost of executing the said part of the works or of completing the works as the case may be. If the cost of completing the works or executing a part thereof as aforesaid shall exceed the balance due to the contractor, the contractor shall pay such excess. Such payment of excess amount shall be independent of the liquidated damages for delay, which the contractor shall have to pay if the completion of works is delayed.

29.2 In addition, such action by the owner as aforesaid shall not relieve the contractor of his liability to pay liquidated damages for delay in completion of works as defined in clause 27.1.2 of this section.

29.3 The termination of the contract under this clause shall not entitle the contractor to reduce the value of the performance bank guarantee nor the time thereof. The performance guarantee shall be valid for the full value and for the full period of the contract including guarantee period.

30.0 DELAYS BY OWNER OR HIS AUTHORISED AGENT:-

In case the contractor's performance is delayed due to any act of omission on the part of the owner or his authorized agents, then the contractor shall be given due extension of time for the completion of the works, to the extent such omission on the part of the owner has caused delay in the contractor's performance of his work. Regarding reasonableness or otherwise of the extension of time, the decision of the SUPERINTENDING ENGINEER (RE), JVVNL, JAIPUR shall be final.

31.0 TERMINATION OF CONTRACT ON OWNER'S INITIATIVE:-

31.1 The owner reserves the right to terminate the contract either in part or in full due to reasons other than those mentioned under clause entitled contractor's default. The owner shall in such an event give fifteen days (15 days) notice in writing to the contractor of his decision to do so.

31.2 The contractor upon receipt of such notice shall discontinue the work on the date and to the extent specified in the notice, make all reasonable efforts to obtain cancellation of all orders and contracts to the extent they are related to the work terminated and terms satisfactory to the owner, stop all further sub-contracting or purchasing activity related to the work terminated, and assist the owner on maintenance protection and disposition of the work acquired under the contract by the owner.

31.3 In the event of such a termination the contract shall be cancelled without any liability on either side.

31.4 If the contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the contractor is a partnership concern and one of the partners dies, then unless the owner is satisfied that the legal representatives of the individual contractor or of the proprietor of the proprietary concern and in the case of partnership, the surviving partners, are capable of carrying out and completing the contract the owner shall be entitled to cancel the contract as to its incomplete part without being in any way liable to payment of any compensation to the estate of deceased contractor of the contract, The decision of the owner that the legal representatives of the deceased contractor or surviving partners of the contractor's firm cannot carry out and complete, the owner shall not hold the estate of the deceased contractor and / or the surviving partners of the estate of the deceased contractor and /or the surviving partners of the contractor's firm liable to damages for not completing the contract.

32.0 CHANGE OF NAME OF THE BIDDER / CONTRACTOR:-

32.1 At any stage after Biding, the Owner shall deal with the Contractor only in the name and at the address under which he has submitted Bid. All the liabilities / responsibilities for due execution of the Contract shall be that of the Contractor and in no circumstance, he shall be relieved of any obligations under the Contract. The Owner may, however, at his discretion deal with the, Agents / Representatives / Distributors / Manufacturers / Associates / Principals / Sister concerns and such dealings shall not absolve the Contractor(s) from his responsibilities / obligations / liabilities to the Owner under the contract.

32.2 Any change / Alteration of name / Constitution / Organization of the Contractor shall be duly notified to the Owner and the Owner reserves the right to determine the Contract, in case of any such Notification. In the event of such determination, the Owner may affect the purchase of material not supplied from elsewhere at the risk and cost of the Bidder / Contractor.

33.0 CERTIFICATE NOT TO AFFECT RIGHT OF OWNER AND LIABILITY OF CONTRACTOR:-

No interim payment certificate of the engineer nor any sum paid on account by the owner nor any extension of time for execution of the works granted by the engineer shall affect or prejudice the rights of the owner against the contractor or relieve the contractor of his obligations for the due performance of the contract, or be interpreted as approval

of the works done or of the equipment furnished and no certificate shall create liability for the owner to pay for alterations, amendments, variations or additional works not ordered, in writing by the engineer or discharge the liability of the contractor for the payment of which he is bound to indemnify the owner nor shall any such certificate nor the acceptance by him of any sum paid on account or otherwise affect or prejudice the rights of the contractor against the owner.

34.0 CONTRACT PRICE:

The lump sum price with details of price of each item for equipment & erection portion as mentioned H-schedule of the bid with additions & deletions as may be agreed before signing of the contract for the entire scope of the work shall be treated as the contract price. Prices agreed by the bidder and subsequently termed as contract price shall remain firm and no price variation shall be allowed.

- (i) The bidder(s) are requested to quote FIRM Price in Indian Rupees only.
- (ii) The prices quoted should be Unit all-inclusive price including GST and freight & insurance, etc.
- (iii) It is the responsibility of the bidder to make sure about the correct rates of duty / tax if any Levi able on the work / service at the time of tendering. If the rates assumed by the Bidder(s) are less than the current rates prevailing at the time of tendering, the Nigam will not be responsible for the mistake.
- (iv) The Total cost of tender as received (material cost, erection & commissioning, including guarantee) shall be considered for deciding lowest (L-1) rates. The unit

cost quoted shall be the indicative for calculating actual charges for making payments.

35.0 DEDUCTION FROM CONTRACT PRICE:-

All costs, damages or expenses which the owner may have paid, for which under the contract the contractor is liable, will be claimed by the owner. All such claims shall be billed by the owner to the contractor regularly as and when they fall due. Such bills shall be supported by appropriate and certified vouchers or explanations, to enable the contractor to properly identify such claims. Such claims shall be paid by the contractor within fifteen (15) days of the receipt of the corresponding bills and if not paid by the contractor within the said period, the owner may then deduct the amount, from any payment due or becoming due by him to the contractor under the contract or may be recovered by actions of law or otherwise, if the contractor fails to satisfy the owner of such claims.

36.0 REPLACEMENT OF DEFECTIVE PARTS AND MATERIALS:-

36.1 If during the progress of the works the engineers finds/ decides and inform in writing to the contractor, that the contractor has procured any equipment or part of the equipment unsound or imperfect or has used any equipment and or carried out the work inferior than the quality specified, the contractor on receiving details of such defects or deficiencies shall at his own expense within seven(7) days of his receiving the notice, otherwise, within such time as may be reasonably necessary for making it good, proceed to alter, re-construct or remove such work and furnish fresh, equipment and or re-do the work meeting with the standards of the specifications. In case the contractor fails to do so, the engineer may on giving the contractor seven (7) days notice in writing of his intentions to do so, proceed to remove the portion of the works so complained of and, at the cost of the contractor, perform all such work or furnish all such equipment provided that nothing in this clause shall be deemed to deprive the owner of invoking any rights under the contract which the owner may otherwise have in respect of such defects and deficiencies.

36.2 The contractor's full and extreme liability under this clause shall be satisfied by the payments to the owner of the extra cost, of such replacement procured, including erection, as provided for in the contract, such extra cost being the ascertained difference between the price paid by the owner for such replacement and the contract-price portion for such defective Equipment and repayments of any sum paid by the owner to the contractor in respect of such defective Equipment. The contractor's extreme liability under this clause shall be limited to repayment of all sums paid by the owner under the contract for such defective Equipment.

37.0 CONSIGNEE:

The material after clearance of Inspection shall be directly consigned to beneficiary site or as specified by the order placing authority.

38.0 **TERMS OF PAYMENT:**

38.1 A. The terms of payment for the equipment / material and its erection charges are as detailed herein. The payment to the contractor for the material / equipment & erection charges shall be made by the Sr. Accounts Officer (CPC) of the Nigam after fulfillment of the following contractual formalities:

- (a) Acceptance of letter of award and signing of Contract Agreement.
- (b) Submission of Security Bank Guarantee (SBG) from a nationalized / scheduled bank, 5 % of the value of work order . The SBG shall be valid till three month from the date of issue with further claim of three months, and required to be extended as deemed necessary.

The payment shall be made as under:-

- C. The contractor may opt for mobilization advance of 20% of the ordered value upon furnishing of Bank Guarantee of equivalent amount valid till date of commissioning as mentioned in the work order with additional claim period of six month (Anex---).
- D. No payment for indivisible pump set shall be released. Payment shall be released cluster-wise and a minimum of 100 Pump sets shall be considered a cluster. 90% payment shall be released against supply, erection, testing and commissioning with adjustment of proportionate mobilization advance if any.
- E. Balance 10 % payment shall be released after expiry of guarantee period (60 month- from date of installation of that cluster) . This balance 10 % may also be released against submission of Performance Bank Guarantee (PBG) of equivalent value from a Nationalized Bank. Initially this PBG shall be for 5 years from the date of commissioning of system with inimum two years validity with six month grace period.
- F. All the above payment shall be released by Sr. Accounts Officer (CPC), of respective Discoms, through RTGS. The purchaser will take all possible effort to make payment to the contractor / supplier generally on 30th day after receipt of duly verified of following documents in the office of paying authority (Sr. Accounts Officer (CPC)) and completion of contractual formalities.:-
 - a. Appropriate bills in triplicate.
 - b. Inspection cum commissioning report jointly signed by contractor, concerned AEN(O&M) of Discom and the beneficiary.
 - c. Colored photograph of SPV array, pump, controller /inverter showing discharge of water duly certified by AEN(O&M) .
 - d. Handing over certificate duly signed by beneficiary, contractor and concerned AEN(O&M).
 - e. Certificate from any licensed holder contractor/supervisor , certifying that all electrical work have been carried in accordance with the applicable electrical safety standard.

38.2 For the delayed payments, if any, the Nigam will not pay any interest.

NOTE: -The commencement of payment shall be effective only after completion of all contractual formalities and acceptance of BGs.

(a) CURRENCY OF PAYMENTS:

All payments under the contract shall be made in Indian Rupees only.

38.3 For the delayed payments, if any, the Nigam will not pay any interest.

39.0 GENERAL RESPONSIBILITIES OF THE CONTRACTOR:

39.1 WORKS EXECUTIONS:

The contractor shall, subject to provisions of the contract and with due care and elegance execute the works and provide all labour including the supervision thereof, materials, constructional plant and all other things, whether of a temporary or permanent nature, required in and for such execution, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the contract.

39.2 WORKS SAFETY:

The contractor shall take full responsibility for the adequacy and safety of all site operations and methods of construction

39.3 SUPERVISION BY THE CONTRACTOR:

The contractor shall provide all necessary supervision during the execution of the works and as thereafter as the Engineer may consider necessary for the proper fulfillment of contractor's obligations under the contract.

39.4 ADHERENCE TO COMPLETION PERIOD:

On receipt of the Purchase Order, the contractor shall take over the site and **the entire work shall be completed as per "Completion of Work"**.

Any delay in completion of works would attract Liquidated damages as specified in the specification.

39.5 EXTENSION OF TIME FOR COMPLETION:

No extension of time for services to be rendered including procurement of necessary materials granted to the contractor should affect or prejudice the right of the DISCOM against the contractor or relieve the contractor of his obligations for the due payment of damage whether duly ascertained or certified or not any sum against the payment of which he is bound to indemnify to the DISCOM.

Extension of time will be given if the delay is on the account of DISCOM.

Should the amount of extra or additional work of any kind or any cause of delay referred to in these conditions or special circumstances of any kind whatsoever which may occur, other than through a default of the contractor, be such as fairly to entitle the contractor, to an extension of time for the completion of the works, the Engineer shall determine the amount of such an extension and shall notify the employer and contractor accordingly provided that the Engineer is bound to take into account any extra or additional work or other special circumstances unless the contractor has **within 28 days** after such work has commenced, or such circumstances have arisen, or as soon thereafter as is practicable, submitted to the Engineer/Engineer's representative full and detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.

39.6 SUSPENSION OF WORKS :

(i) The contractor shall on the written order of the Engineer, suspend the progress of the works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall during such suspension properly protect and secure the work, so far as is necessary in the opinion of the Engineer. The extra cost incurred by the contractor in giving effect to the Engineer's instructions under this clause shall be paid the amount of such costs as shall be reasonable.

- a. Otherwise not provided for in the contract or
- b. Necessary by reason of some default on the part of the contractor, or
- c. Necessary by reason of climatic conditions on the site, or
- d. Necessary for the proper execution of works or for the safety of the works or any part thereof in so far as such necessity does not arise from any act or default by the Engineer/Engineer's representative or from any of the expected risks defined in this specification. Provided that the contractor shall not be entitled to recover any such extra cost unless he gives written notice of his intention of claim to the Engineer within twenty eight days of the Engineer's order. The Engineer shall settle and determine such extra payment and/or extension of time to be made to the contractor in respect of such claim as shall in the opinion of the Engineer be fair and reasonable

39.7 QUANTITIES:

The quantities are only **tentative** and estimated quantities of work. They are not to be taken as the **actual and correct quantities** of the work to be executed by the contract or in fulfillment of his obligations under the contract.

40.0 NOTICES:

40.1 All notices given by one party to the other including written orders given by the Employer, Engineer's representative to the contractor under the terms of the contract shall be in writing or if by Telegram/Telex/Fax/E-Mail be confirmed in writing. Period of notice shall be **14 days** unless otherwise stated.

40.2 For the purpose of issuing notices to the purchaser in respect of works and supply of goods, the following is the address of the Purchaser.

THE SUPERINTENDING ENGINEER (RE) ,JVNL, Jaipur

41.0 DETAILS CONFIDENTIAL:

41.1 The contractor shall treat the specifications, contract document etc. as confidential.

41.2 The materials and services covered under these specifications shall be performed as per requirements of the relevant standards refereed hereinafter against each of equipment and services.

41.3 No extension of time for services to be rendered including procurement of necessary materials granted to the contractor shall affect or prejudice the right of the DISCOM against the payment of which he is bound to indemnify to the DISCOM. Extension of time will be given if the delay is on the account of the DISCOM.

ANNEXURE – A (GCC)**JAIPURVIDYUT VITRAN NIGAM LTD.**

(On non-judicial stamp paper worth Rs.5,000/- of Govt. of Rajasthan)

FORMAT FOR AGREEMENT

This agreement is signed on this _____ (day) _____ of _____ (month) _____ of _____ (year) _____ at Jaipur between _____ M/s _____ (here-in-after called as “Party No 1”), and Jaipur Vidyut Vitran Nigam Ltd., Jaipur (here-in-after called as “Party No.2”), on the following terms and conditions:

That, the “Party No.1” has agreed to Execute Work as per Scope / Specifications mentioned in

Notice for RFP No. NIT-01 / SPV Pump-AC/DC / 2017-18/ _____ Dated - _____ issued by “Party No.2”.

That, the “Party No.1” has also agreed to contract of Survey, Design, Supply, installation & Commissioning, of various capacities/ heads of Solar Water Pumping Systems (A solar photovoltaic (SPV) water pumping system consists of SPV panel (array) ,should be mounted on a suitable structure with a provision of three times manual tracking, AC/DC, submersible/ Surface Motor pump set with a suitable inverter/controller with a provision of remote monitoring of the pump, electronics(MPPT, Electronics Protections), interconnected cables, on-off switch, G.I./HDPE riser Pipe / suction pipe & all required accessories, fittings)along-with 5 years (including manpower)guarantee and Comprehensive Maintenance Contract (CMC) in different villages located all over state of Rajasthan in accordance with MNRE specification & as per scope / specifications mentioned in Notice for RFP No. 01/ SPP Pump-AC/DC / 2017-18 / _____ Dated - _____ issued by “Party No.2”, on the rates already accepted / agreed upon as mentioned in the annexed “Rate sheet”.

That, the Rates shown in the Rate Sheet(s) enclosed are valid up to the Agreement Period, and in case of additional requirements of works as per same Scope / Specifications mentioned in Notice for RFP No. 01 / SPP/ Pump-AC/DC / 2017-18 / _____ Dated - _____ issued by “Party No.2” same Rates shall be applicable up to the Agreement Period, if there is no change is suggested in the Specifications / Guidelines of MNRE .

That, all terms and conditions, scope of work / specifications mentioned in Notice for RFP No.01 /SPP/ Pump-AC/DC/ 2017-18 Dated----- issued by “Party No.2”, which have been agreed upon and also the Condition(s) contained in the Correspondence(s) made in this matter will also form part of this Agreement. That, in the event of any dispute or difference whatsoever arising under this Contract Agreement, the same shall be referred to the settlement committee. All the proceedings under settlement committee will take place in Jaipur. The award in such settlement committee shall be final and binding on both the parties.

The agreement will be valid up to The validity period may be extended further with the Mutual Consent on unchanged Terms & Condition(s), Specification(s) and Rate(s) up to one year.

For, the matter(s) of any dispute between the “Party No.1” and “Party No.2” shall be subjected to Jaipur jurisdiction.

That, this agreement executed between the parties who affix their signatures at Jaipur, in witness whereof the parties hereto have signed the agreement:

Witnesses;

Party No. 1

Party No.2

1.

2.

ANNEXURE-C (GCC)**GUARANTEE FORM**

(Guarantee to be furnished on non-judicial stamp paper worth Rs. 100/-)

To,

The SUPERINTENDING ENGINEER (RE),
Jaipur Vidyut Vitran Nigam Limited,
Old Powerhouse, Bani Park,
Jaipur-302006

Dear Sir,

THIS DEED OF GUARANTEE is made this day _____ of _____ of the year _____

Between the SUPERINTENDING ENGINEER (RE), JAIPUR Vidyut Vitran Nigam Limited (which expression shall unless excluded by or repugnant to the context includes his successors and assignees) of the one part and _____ hereinafter called "The Contractor" (which expression shall unless excluded by or repugnant to the context includes its successors and assignees) of the other part.

WHEREAS MESSERS _____ (hereinafter called the contractor) agreed to supply the material for erection of ----- on turnkey basis from _____ (Name of line) to the Superintending Engineer, Jaipur Vidyut Vitran Nigam Ltd., against Work Order No. _____ dated _____ (hereinafter referred to as the contract).

AND WHEREAS as per the terms of the contract it was provided that the contractor should furnish a Guarantee for supplying any material free of cost that may be required due to defects arising from faulty materials, design and workmanship, so as to make it meet the guarantees and requirements of the contract.

AND WHEREAS at the request of the Superintending Engineer (RE) JVVNL, Jaipur, the contractor M/s _____ has agreed to execute these presents.

NOW THIS INDENTURE WITNESS AND IT IS HEREBY AGREED AND DECLARED by the and between the parties hereto as follows:

1. The Contractor hereby guarantees to the **SUPERINTENDING ENGINEER (RE), JVVNL, Jaipur**, the fulfillment by the contractor of the various obligations imposed on him under the aforesaid contract including the obligations of the contractor to supply materials of the good quality, design and workmanship and the Contractor further guarantees to the JAIPUR Vidyut Vitran Nigam Ltd. that they (M/s _____) shall substitute and supply any material free of cost that may be required due to defects

arising from faulty material design and workmanship and the Contractor undertakes to indemnify and keep the **SUPERINTENDING ENGINEER (RE)**, JVVNL, Jaipur. indemnified to the extent of full value of contract (Rs._____) (in words Rupees _____) against any loss or damage that may be caused to or suffered by the JAIPUR Vidyut Vitran Nigam Ltd. by reason of any failure by the contractor to supply materials of good quality, design and workmanship as aforesaid. The decision of **SUPERINTENDING ENGINEER (RE)**, JVVNL, Jaipur. as to whether the contractor (M/s _____) have failed or neglected to perform or discharge their duties and obligations as aforesaid shall be final and binding on the Contractor.

2. The guarantee herein contained shall remain in full force and effect during the period that would be taken in the performance of the said contract and it shall continue to be valid till all the obligations to the Jaipur Vidyut Vitran Nigam Ltd. under or by force of the contract have been fully and properly discharged by the said contractor, subject however, to the conditions that the JAIPUR Vidyut Vitran Nigam Ltd. will have no right under this guarantee after **60 months** from the date of commissioning and handing over the SPV pump set to beneficiary provided further that if any claim arises by virtue of this guarantee before the aforesaid date, the same shall be enforceable against the Contractor notwithstanding the fact that the same is enforced after the aforesaid date.
3. The Guarantee herein contained shall not be affected by any change in the constitution of the Contractor.
4. The Contractor further undertake not to revoke, this Guarantee during its currency except with the previous consent of the **SUPERINTENDING ENGINEER (RE)**, JVVNL, Jaipur, in writing.
5. All disputes arising under the said guarantee, between the Contractor and the JAIPUR Vidyut Vitran Nigam Ltd. shall be subject to the jurisdiction of Courts, only at JAIPUR in Rajasthan alone.

IN WITNESS WHEREOF THE CONTRACTOR HAS executed these presents the day and year written above.

Yours faithfully,

(EXECUTANT)

Signed by the above named Contractor in presence of:-

SUPERINTENDING ENGINEER (RE)

(Signature with full Name and Address)

Witness:-

1.

2

(Attested by Notary Public or First Class Magistrate or directly confirmed by the executing Contractor)

ANNEXURE-D(GCC)**SECURITY BANK GUARANTEE**

(On non-judicial stamp paper worth Rs.100/- of Govt. of Rajasthan)

The

Jaipur Vidyut Vitran Nigam Limited

Jaipur.

In consideration of the **SUPERINTENDING ENGINEER (RE)**, JVVNL, Jaipur (hereinafter called the Owner or his assigns) having agreed that in respect of order No._____dated _____(hereinafter referred to as contract) placed with M/s._____having their registered office at _____(hereinafter called the contractor), the contractor need not to furnish security deposit in cash and/or bank draft, We the _____ having its head office at _____(hereinafter called the Bank) undertake to pay the owner on demand the sum or sums of money payable as security deposit by the contractor in respect of Order No._____dated _____ placed by the Nigam with the contractor subject to the following terms & conditions.

(1) Payment pursuant in this undertaking will be demanded by the owner from the Bank and will be met by the Bank without question in the case in which the Contractor, on receipt of the order and/or after the acceptance of this tender has been communicated to him by the owner ,make default in entering into an agreement or having entered into such Agreement or otherwise the contractor makes default in carrying out the contract thereof. As to whether the occasion or ground is arisen for such demand the decision of the **SUPERINTENDING ENGINEER (RE)** or any other officer exercising the powers of **SUPERINTENDING ENGINEER (RE)**, JVVNL,Jaipur shall be final.

(2) The liability of the Bank shall not at any time exceed to Rs._____(Rupees _____)

(3) The undertaking will be determined on _____but will, note with standing such determination, continue to be in force till the expiry of 3 months from the date of completion of line against the aforesaid order.

(4) No variation in the terms of tender, acceptance or agreement as between the contractor and the owner made without the owner's consent shall discharge this undertaking.

(5) No indulgence or grant of time by the owner to the contractor without the acknowledgement of the Bank will discharge the liabilities of the Bank under this guarantee.

(6) The guarantee herein contained shall not be affected by any change in the constitution of the contractor.

(7) Not with standing anything contained herein before, the Bank's liability under this guarantee is restricted to Rs.__(Rupees_____) and the guarantee shall remain in force up to_____ unless demand or claim in writing is presented on the Bank within **3 months** from that date, the Bank shall be released and discharged from all liabilities there under. However the validity of the bank guarantee shall be extended as and when required by the Nigam.

(8) All disputes arising under the said guarantee between the Bank and the NIGAM or between the contractor and the Nigam pertaining to the guarantee shall be subject to the jurisdiction of Courts only at JAIPUR in Rajasthan.

(9) The Bank further undertakes not to revoke this guarantee during its currency except with the previous consent of the **SUPERINTENDING ENGINEER (RE)**, JVVNL IN WITNESS WHEREOF the Bank has executed these presents the day _____ and year _____.

Yours faithfully,

Bankers (EXECUTANT)

Witness:

1.

2.

ANNEXURE-F (GCC)**PERFORMA FOR PERFORMANCE BANK GUARANTEE FORM**

(On non-judicial stamp paper worth Rs.100/- of Govt. of Rajasthan)

To,

The **SUPERINTENDING ENGINEER (RE)**,

Jaipur Vidyut Vitran Nigam Ltd.),

Jaipur.

Dear Sir,

THIS DEED OF GUARANTEE is made this day _____ of _____ of the year _____ between the **SUPERINTENDING ENGINEER (RE)**, Jaipur Vidyut Vitran Nigam Ltd. (which expression shall unless excluded by or repugnant to the context includes his successors and assignees) of the one part and the _____, having its head office at _____ hereinafter _____ hereinafter called "The Bank" (which expression shall unless excluded by or repugnant to the context includes its successors and assignees) of the other part.

WHEREAS MESSERS _____ (hereinafter called contractor) agreed for _____ turnkey basis to the **SUPERINTENDING ENGINEER (RE)**, JAIPUR VIDYUT VITRAN NIGAM LTD. against Work order No. _____ dated (hereinafter referred to as the contract).

AND WHEREAS as per the terms of the contract it was provided that the contractor should furnish a Bank Guarantee _____% _____ of the total contract value (material & erection) by way of security for supplying any material and erection executing/completing free of cost any erection work that may be required due to defect arising from faulty design and workmanship, so as to make it meet the guarantee and requirements of the contract.

AND WHEREAS at the request of the contractor the Bank has agreed to execute these present.

NOW THIS INDENTURE WITNESS AND IT IS HEREBY AGREED AND DECLARED by the and between the parties hereto as follows:

1. The Bank hereby guarantees to the **SUPERINTENDING ENGINEER (RE)**, JAIPUR VIDYUT VITRAN NIGAM LIMITED, the fulfillment by the contractor of the various obligations imposed on him under the aforesaid contract including the obligations of the contractor to supply material and to timely execute /complete erection work of good quality and workmanship and the bank further guarantees to the JAIPUR VIDYUT VITRAN NIGAM LTD. that the contractor shall substitute and supply any material and execute /complete free of cost, any additional work that may be required due to defects arising from faulty design and workmanship and the Bank undertakes to indemnify and keep the **SUPERINTENDING ENGINEER (RE)**, JAIPUR VIDYUT VITRAN NIGAM LTD. indemnified to the extent of Rs. _____(in words Rupees _____) against any loss or damage that may be caused to or suffered by the JAIPUR VIDYUT VITRAN NIGAM LTD. by reason of any failure by the contractor to timely supply material and executing/completing erection work of good quality and workmanship as aforesaid and further undertake to pay to the **SUPERINTENDING ENGINEER (RE)**, JAIPUR VIDYUT VITRAN NIGAM LTD. on demand a sum not exceeding Rs. _____(Rupees _____) in the event of the contractor failing or neglecting to perform and discharge the aforesaid duties and obligations on their part to be observed and performed under the said contract.

The decision of the **SUPERINTENDING ENGINEER (RE)**, JAIPUR VIDYUT VITRAN NIGAM LTD. as to whether the contractor has failed or neglected to perform or discharge their duties and obligations as aforesaid and as to the amount payable to the **SUPERINTENDING ENGINEER (RE)**, JAIPUR VIDYUT VITRAN NIGAM LTD. by the Bank herein shall be final and binding on the Bank.

2. The guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said contract and it shall continue to be enforceable till all the obligations to the JAIPUR VIDYUT VITRAN NIGAM LTD. under or by force of the contract have been fully and properly discharged by the said contractor, subject however, to the conditions that the JAIPUR VIDYUT VITRAN NIGAM LTD. will have no right under this guarantee after **60 Months + 6 Months grace period** from the date of completion /

commissioning / handing over SPV pump set to beneficiary, provided further that if any, claim arises by virtue of this guarantee before the aforesaid date, the same shall be enforceable against this bank notwithstanding the fact that the same is enforced after the aforesaid date.

3. The guarantee herein contained shall not be affected by any change in the constitution of the contractor or Bank.

4. The **SUPERINTENDING ENGINEER (RE)**, JAIPUR VIDYUT VITRAN NIGAM LTD. shall have the fullest liberty without affecting the guarantee to postpone for any time and from time to time any of the powers exercisable by the NIGAM against contractor and either to enforce or forebear from enforcing any of terms and conditions of the said contract and the Bank shall not be released from its liability under this guarantee and exercise of the JAIPUR VIDYUT VITRAN NIGAM LTD. of the liberty with reference to the matter aforesaid or by the reasons time being given to the contractor or any other forbearance, act or omission on the part of the JAIPUR VIDYUT VITRAN NIGAM LTD. to the contractor or by any other matter or thing whatsoever which under the law relating to the sureties shall but for this provision have the effect of so releasing the bank from such liability.

5. The decision of the **SUPERINTENDING ENGINEER (RE)**, or any other officer exercising the powers of **SUPERINTENDING ENGINEER (RE)**, JAIPUR Vidyut Vitran Nigam Ltd. shall be the final.

6. The Bank further undertake not to revoke the guarantee during its currency except with the previous consent of the, **SUPERINTENDING ENGINEER (RE)**, JAIPUR Vidyut Vitran Nigam Ltd. in writing.

7. All disputes arising under the said guarantee, between the Bank and the Nigam or between the contractor and the Nigam pertaining to the guarantee, shall be subject to the jurisdiction of Courts, only at JAIPUR in Rajasthan alone.

8. Notwithstanding anything contained herein before, the Bank's liability under this guarantee is restricted to Rs. _____ (Rupees _____) and the guarantee shall remain in force up to _____ unless demand or claim in writing is presented on the Bank within six months from that date, the Bank shall be released and discharged from all liabilities there under. However the validity of the bank guarantee shall be extended as and when required by the Nigam.

9. IN WITNESS WHEREOF THE BANK HAS executed these presents the day and year written above.

Yours faithfully,

Bankers (Executants)

Signed by the above named Bank in presence (Name and Address)

Witness 1.

Witness 2.

Attested by Notary Public or First Class Magistrate or directly confirmed by the executing bank.

APPENDIX-1(GCC)**(A) DETAILS OF PROGRESS**

1. Details of progress achieved during I/II fortnight of month _____
2. Order No. and Date _____
3. Installation of SPV Pump Set: _____

Sl.No.	Erection activity (All)	Unit	Total work involved	Work done up to last fortnight	Work done during fortnight	Total work done up to this report	Balance work to be done	Remarks
1.	2.	3.	4.	5.	6.	7.	8.	9.

(B) Details of work done (activity-wise)

SIGNATURE OF THE CONTRACTOR

UNDERTAKING

(to be furnished on the Non-judiciary stamp paper worth Rs. 100/)

We undertake that after completion period of Guarantee Period i.e. five years, of installation & erection of SPV Pump Set, as per contract awarded to us, we shall provide the additional guarantee/ annual maintenance contract, on the demand of beneficiary, at the rate, as mutually decided (between beneficiary & us).

SIGNATURE OF THE CONTRACTOR

APPENDIX-2 (GCC)**CHECK LIST****CONTRACT AGREEMENT**

- 1) Required stamp paper of Rs. 5,000/- (Non judicial stamp paper of Rajasthan Government)
- 2) Stamp paper should be in the name of firm
- 3) Stamp paper should be valid (should not be old more than six month)
- 4) Should be in triplicate
- 5) Contract agreement should be according to our prescribed format
- 6) The enclosures should be attached as required by Work Order
- 7) All the pages of agreement along with its enclosures should be signed by the authorized signatory
- 8) The clause Number of work order should be recorded in the blank space wherever required alongwith other information like work order No., details of firms, details of deposit etc.
- 9) The agreement should be witnessed by the two persons along with their name and address
- 10) The Power of Attorney in respect of authorized signatory should be attached with the contract agreement duly attested by first class magistrate or Notary Public on Non judicial stamp paper of Rs. 100/- or as provided in stamp and registration Act, bearing the seal of stamp paper issuing authority to firm along with seal and signature of issuing authority.
- 11) The power of attorney should be witnessed by two persons along with their name and address
- 12) The Power of Attorney should be in triplicate
- 13) The Manufacturer's Warranty should be enclosed with the contract agreement in triplicate if required as per work order.
- 14) The contract agreement is to be executed between the Managing Director, JVVNL , JAIPUR and the firm.

ANNEXURE–A (INB)**Bid Bank Guarantee
(FOR EARNEST MONEY)**

(Bank Guarantee in lieu of 80% of earnest money on non-judicial stamp paper worth Rs.100/-)

Ref : Bank Guarantee No.

Dated:

The Superintending Engineer (RE)
Jaipur Vidyut Vitran Nigam Limited,
Old Power House Near Ram Mandir,
Bani park, Jaipur – 302006.

1. Whereas[name of the Bidder] (hereinafter called “the Bidder”) has submitted its bid dated[date of submission of bid] for the construction of..... [name of contract] (hereinafter called “the Bid”).
2. KNOW ALL PEOPLE by these presents that WE.....[name of bank] of[name of country], having our registered office at..... [address of bank] (hereinafter called “the Bank”), are bound unto..... [name of Purchaser] (hereinafter called “the Purchaser”) in the sum of Rs.* _____ for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of _____ 200 _____.
3. THE CONDITIONS of this obligation are:
 1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder in the Bid Form; or
 2. If the bidder refuses to accept the correction of error in his Bid ; or
 - 3.. If the Bidder, having been notified of the acceptance of its Bid by the Purchaser During the period of bid validity:
 - (a) Fails or refuses to execute the Contract agreement, if required; or
 - (b) Fails or refuses to furnish the performance security, in accordance with the General Conditions of Contract;
 4. We undertake and authorize our branch situated at Jaipur (Rajasthan) address: _____ to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or all of the three conditions, specifying the occurred condition or conditions.
 5. The decision of the SUPERINTENDING ENGINEER (RE), JAIPUR VIDYU VITRAN NIGAM LIMITED, JAIPUR shall be final whether breach has been committed on the right to demand the amount of guarantee from us which has accrued to the Purchaser.
 6. This guarantee shall not cease or determine, if the purchaser grants time or indulgence or vary the terms of the contract with the contractor or without our consent or knowledge.
 7. The guarantee herein contained shall not be affected by any change in the constitution of the contractor.
 8. We, _____ further undertake not to evoke this guarantee during its currency except with the previous consent of the SUPERINTENDING ENGINEER(RE), JAIPUR VIDYUT VITRAN NIGAM LIMITED, JAIPUR.
 9. All disputes arising under the said guarantee between the Bank and the Nigam or

Between the Contractor and the Nigam pertaining to the guarantee, shall be subject to the jurisdiction of Courts in Jaipur, Rajasthan alone.

10. This guarantee will remain in force up to and including one hundred Eighty (180) Days after the date of the opening of bids, i.e. up to _____, with a further grace period of Ninety (90) days and any demand in respect thereof should Reach the Bank not later than the above date.

Yours faithfully,
Bankers (EXECUTANT)

Witness:-

- 1.
- 2.

*The Bidder should insert the amount of the guarantee in words and figures Denominated in the currency of bid. This figure should be same as shown in clause No. 13.0 of the "instructions to bidders".

Annexure – B (INB-Section-I)

Bank Guarantee verification checklist

	CHECK – LIST	Yes	No
1.	Does the bank guarantee compare verbatim with standard Performa for BG		
2.(a)	Has the executing Officer of BG indicated his name designation & power of Attorney No. / Signing power Number etc. on BG.		
(b)	Is each page of BG duly Signed/ initialed by the executants and last page is signed with full particulars as required in the standard Performa of BG and under the seal of the bank.		
©	Does the last page of the BG carry the signatures of two witnesses alongside the signature of the executing Bank Manager		
3. (a)	Is the BG on non-judicial stamp paper of appropriate value		
(b)	Is the date of sale of non-judicial stamp paper shown on the BG and the stamp paper is issued not more than Six months prior to the date of execution of BG.		
4.(a)	Are the factual details such as Bid specification No., LOA NO. Contract price, etc, correct.		
(b)	Whether Overwriting /cutting, if any on the BG, authenticated under signature & seal of executants		
5.	Is the amount and validity of BG is inline with contract provisions		
6.	Whether the BG has been issued by a Nationalized bank / Non-Nationalized Bank acceptable to Buyer /Scheduled Bank in India (the applicability of the bank should be in line with the provisions of bidding documents)		

Yours faithfully,
(Signature).....

Date :

(Name)....

.....

.....

...

(Designation).....

.....

...

(Common Seal).....

.....

Place :

COVER II (PART'A')
Commercial Terms & Conditions

Bidder's Name & Address:

To,

The Superintending Engineer (RE),
Jaipur Vidyut Vitran Nigam Limited
Jaipur - 302006

Sub: Confirmation for "No Deviation" in Commercial terms & conditions of package No.
JPD/SE/RE/TN-1

Dear Sir,

We hereby confirm that there is no deviation in commercial terms & conditions stipulated
in the bidding documents and we are agreed to adhere the same strictly.

Yours faithfully,

(Signature).....

Date :

Place :

(Name).....

(Designation).....

(Common Seal).....

COVER II (PART'A)
Technical Terms & Conditions

Bidder's Name & Address:

To,

The Superintending Engineer (RE),
Jaipur Vidyut Vitran Nigam Limited
Jaipur - 302006

Sub : Confirmation for "No Deviation" in Technical terms & conditions of package No. JPD/SE/RE/TN-1

Dear Sir,

We hereby confirm that there is no deviation in technical terms & conditions stipulated in the bidding documents and we are agreed to adhere the same strictly.

We also confirm that tendered material shall be procured from vendors approved by MNRE and shall be conforming to various requirements of relevant ISS / Specification and as per the latest specification, design and drawing approved by the MNRE, New Delhi.

Yours faithfully,

(Signature)

Date :

Place :

(Name)

(Designation)

(Common Seal).....

COVER II (PART'A')
Qualification Requirements Details

Bidder's Name & Address:

To,

The Superintending Engineer (RE),
Jaipur Vidyut Vitran Nigam Limited,
Japur – 302006

Dear Sir(s),

We hereby declare that we are qualified for bidding in reference to "Qualification Requirements" of the bidding documents No. JPD/SE/RE/TN-1 and submit the following certificate(s) /documents in support of the above :-

- 1.
- 2.
- 3.

Note:

1. Furnishing of a certificate issued by a registered chartered Accountant certifying fulfilment of specified qualification requirements is essential. The name, stamp and the registration no. of the Chartered Accountant are necessary of the Certificate.
2. **Copies of Audited Balance Sheet pertaining to last three years.**

Date:

Place:

Name & Designation
(with seal of the firm)

COVER II (PART'A')
Qualification Requirements Details

Bidder's Name & Address:

Details of Works Executed

S.No.	Financial year	Awarding Authority	Description of Work	Work order		Stipulated completion period	Date of actual completion	Value of work actually executed
				No.& date	Amount (Rs.in lacs)			
1								
2								
3								
4								
5								
	Total							

Note:

- (1) Copy of each work order & completion report be enclosed.
- (2) Completion report must be certified by a technical officer only, as per cl. No. 1 (c) (iii) of Qualification Requirement and should also be duly attested by Notary Public.
- (3) Furnishing of the completion report of each of work executed specially indicating the amount thereof, is essential as the qualification of the bidder shall be determined on this basis. The Work experience shall not be counted on account of non-furnishing of such documents.
- (4) The above details shall also be certified by the Chartered Accountant with their membership No.

Date:

(Signature).....

Place:

(Name).....

Designation.....

(Common Seal).....

COVER II (PART'A)
Work Completion Schedule
Bidder's Name & Address:

To
The Superintending Engineer (RE),
Jaipur Vidyut Vitran Nigam Limited,
Japur – 302006

Dear Sir(s),

We hereby declare that the following Work Completion Schedule shall be followed by us in supply, erection and commissioning the equipment's for works as detailed in the "SCHEDULE-H" under Section-IV Part-II of package. JPD/SE/RE/TN-1

S. No.	Stage	Period in months
1	Survey	The survey of work shall commenced immediately after receipt of purchase order and list of beneficiary
2.	Commencement	The execution of work shall be commenced within fifteen days after receipt of list of beneficiary .
3	Completion of ordered work	Within 45 days after commencement

Date:

(Signature).....

Place:

(Name).....

(Designation).....

(Common Seal).....

SCHEDULE-5

COVER II (PART'A')

List of Equipment's and Technical Hands

Bidder's Name & Address:

To,

To
 The Superintending Engineer(RE),
 Jaipur Vidyut Vitran Nigam Limited,
 Japur – 302006

Dear Sir(s),

We hereby declare that we have sufficient men & machinery for successful execution of work against this bid enquiry, the details of which are given as under:-

Note: The details of manufactures from whom the required material conforming to requirement of ISS/ specification shall be bought are also to be indicated. Separate performa to be filled for men and machinery.

Date: (Signature).....

Place: (Name).....

(Designation).....

(Common Seal).....

SCHEDULE-6

COVER II (PART'A)

CHECK LIST FOR BID QUALIFICATION

(TO BE PROVIDED IN "COMMERCIAL AND TECHNICAL BID")

Sr. No.	Particulars	Bidder's response
1.	Name and Address of the Firm/Company	
2.	Address of the Registered office, Phone Nos. etc	
3.	Address of the Factory/Works, Phone Nos. etc.	
4.	Fax No. for correspondence	
5.	Whether the copies of orders executed during the last five years in respect of such type of works to State Electricity Boards/Power utilities /Govt. agencies enclosed. (as per schedule 3A)	Yes / No
6.	Whether performance certificates from the end users enclosed	Yes / No
7.	Annual Turnover of the Bidder for the last three years duly certified by CA's 2014-2015 2015-2016 2016-2017	Yes / No
8.	a) Whether documentary evidence produced for the annual turn over. b) If so, whether certificate from auditor furnished or copies of audited annual statement of accounts furnished along with copy of ITR's for last three years.	Yes / No
9.	Project experience as per qualification requirement enclosed or not?	Yes/No

DATE :

SIGNATURE OF THE BIDDER

PLACE:

NAME :

STATUS IN THE COMPANY

(AFFIX SEAL OF THE COMPANY)

SECTION-III

PRE QUALIFICATION REQUIREMENT

GENERAL: The Bidders shall become eligible to Bid, on satisfying the following 'Bid Qualification Requirements' and on furnishing of the required documentary evidences along with the tender

Eligibility conditions

1. The bidder should be :

S.No	For one Lot	For more than one lot
1	<p>A Registered company with manufacturing facility in India for:- SPV modules/Motor-Pump sets/Solar Pump controller (Test certificate for above components from a MNRE accredited test lab is mandatory).</p> <p style="text-align: center;">OR</p> <p>A PV system integrator with three years track record in GRID/ OFF-GRID PV systems.</p> <p style="text-align: center;">OR</p> <p>MNRE/ RRECL empanelled company to participate in Solar Pumping Programme through NABARD.</p>	<p>A Registered company with manufacturing facility in India for:- SPV modules / Motor-Pump sets /Solar Pump controller (Test certificate for above components from a MNRE accredited test lab is mandatory).</p> <p style="text-align: center;">OR</p> <p>A PV system integrator with three years track record in GRID/ OFF-GRID PV systems.</p> <p style="text-align: center;">OR</p> <p>MNRE/ RRECL empanelled company to participate in Solar Pumping Programme through NABARD.</p>
2	Not be blacklisted by any Govt. Agency.	Not be blacklisted by any Govt. Agency.
3	ISO 9001:2008 certification	ISO 9001:2008 certification.
4	<p>Experience of at least installation & commissioning of 25 set solar photovoltaic (SPV) water pumping system. upto 31st March of the previous financial year.</p> <p style="text-align: center;">Or</p> <p>Bidder who had supplied and successfully commissioned 250kW off Grid / grid connected solar photovoltaic systems (SPV), upto 31st March of the previous financial year.</p>	<p>Experience of at least installation & commissioning of 10% solar photovoltaic (SPV) water pumping systems of offered quantity(Subject to maximum 500 Nos.) installed & commissioned upto 31st March of the previous financial year.</p> <p style="text-align: center;">Or</p> <p>Bidder who had supplied and successfully commissioned 250KW off Grid / grid connected solar photovoltaic systems (SPV), upto 31st March of the previous financial year.</p>
5	<p>Cumulative experience of bidder in executing contracts of off-grid / grid connected Solar Photovoltaic systems/ power plants (Installed and Commissioned) should be at least 25 % of the lot value upto 31st March of the previous financial year.</p> <p style="text-align: center;">Or</p> <p>Cumulative Manufacture and supply of Motor-Pump sets/ Solar Pump Controllers/ Inverters (Tested & Certified by MNRER accredited Lab) of the Bidder should be at least 25% of the</p>	<p>Cumulative experience of bidder in executing contracts of off-grid / grid connected Solar Photovoltaic systems/ power plants (Installed and Commissioned) should be at least 20 % of the lots value upto 31st March of the previous financial year.</p> <p style="text-align: center;">Or</p> <p>Cumulative Manufacture and supply of Motor-Pump sets/ Solar Pump Controllers/ Inverters (Tested & Certified by MNRER accredited Lab) of the Bidder</p>

	Lot value. upto 31st March of the previous financial year.	should be at least 20% of the Lots value, upto 31st March of the previous financial year..
6.	<p>Average Annual financial turnover during last three years, ending 31st March of the previous financial year should be at least 30% of the lot value. (OR Rs. 10 Crore, Whichever is less)</p> <p>[Certified copies of the annual returns submitted to the 'Register of companies'(ROC) should be enclosed. For the preceding year, a summarized sheet of turnover certified by registered CA may be enclosed.</p> <p>For Proprietary/partnership companies, copies of Income tax returns with full details of turnover should be enclosed. A summarized sheet of turnover certified by registered CA should also be enclosed.</p>	<p>Average Annual financial turnover during last three years, ending 31st March of the previous financial year should be at least 30% of the lots value. (OR Rs. 50 Crore, Whichever is less)</p> <p>[Certified copies of the annual returns submitted to the 'Register of companies'(ROC) should be enclosed. For the preceding year, a summarized sheet of turnover certified by registered CA may be enclosed.</p> <p>For Proprietary/partnership companies, copies of Income tax returns with full details of turnover should be enclosed. A summarized sheet of turnover certified by registered CA should also be enclosed.</p>
7	Bidders should have Test certificate for the tendered Model of solar water pumping systems from a MNRE authorized testing center at the time of bidding Test certificate should have been issued on or after 1 st January 2014.	Bidders should have Test certificate for the tendered Model of solar water pumping systems from a MNRE authorized testing center at the time of bidding Test certificate should have been issued on or after 1 st January 2014.
8	The bidder should have valid GST Registration certificate. A copy of which should be enclosed.	The bidder should have valid GST Registration certificate. A copy of which should be enclosed.

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SECTION-IV - SCOPE OF WORK

1. DETAILS

- 1.1. Contractor will have full responsibility for packaging, forwarding, transportation, supply and any type of breakages / losses etc. thereto. The goods / systems will be delivered at the destination site, installed and commissioned at site in the perfect conditions as per terms & conditions of Letter of Intent / Work Order.
- 1.2. Manufacturers will have to put a Name plate / Label and Mark Bar code & / Serial No. /Code No. etc. of their Products as per NABL/ MNRE/ BIS/ BEE or other Applicable Specification(s). Further, Contractor shall be required to put a 6"x4" name plate marking "Year of commissioning" and "**DISCOM Solar Pump Scheme**" on structure of the pump system.
- 1.3. The Contractor shall be responsible for survey (Selection of proper bore well / Tube well having sufficient yield in the premises of the beneficiary), Supply, installation & Commissioning, of various capacities/ heads of Solar Photo Voltaic AC/DC, Surface/Submersible Water Pumping Systems with all required accessories and fittings i.e. SPV panel should be mounted on a suitable structure with a provision of three times manual tracking, AC/DC, Surface / submersible Motor pump set with a suitable inverter/controller with a provision of remote monitoring of the pump, electronics (MPPT, Inverter, Electronics Protections), interconnected cables, on-off switch, G.I./HDPE/PVC riser Pipe / suction pipe & all required accessories, fittings, related civil works along-with 5 years guaranty & Comprehensive Maintenance Contract (CMC) there after the sales services of 5 years at the cost of beneficiary, in different villages/sites located all over state of Rajasthan. **The same make of solar panels, pumps and inverter/controller, for which the test report is submitted in the Bid, should be supplied by the Contractor.**
- 1.4. Civil work for installation/grouting of SPV mounting structure/Electrical work etc. shall be in the scope of Contractor. It should have proper foundation as the steel structure of solar panel has to withstand wind of up to 150 km/hr. velocities. A certificate for civil work (such as installation of mounting structure of solar pump etc.) will have to be provided by Contractor, self-certified or from any certified civil engineer certifying, that it will withstand wind speed of 150 km/hr in all weather conditions.
- 1.5. All metal casing or shielding of the pumping system shall be thoroughly grounded to ensure safety of the solar pumping systems.
- 1.6. An Operation and Maintenance Manual, in Hindi language, should be provided with the solar PV pumping system. The manual should have information about solar energy, photovoltaic modules, DC/AC motor pump set, tracking system, mounting structures, electronics and switches. 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 Guaranty card for the modules and the motor pump set should also be provided to the beneficiary. Further, a certificate will have to be provided by the Contractor, from any license holder Contractor / supervisor, certifying that all electrical works are carried out in accordance with applicable electrical safety standards prescribed by GoR from time to time.
- 1.7. Training the user for operation and preventive maintenance of the system is covered under the scope of Contractor. The responsibility of imparting training to beneficiaries of the systems (free of charge), ensuring after sales services and availability of spares at a nearby suitable place / places will rest with the Contractor.
- 1.8. The Contractor shall be required to submit performance report to respective Discom after commissioning on six monthly basis till completion of guarantee period, based on data provided by remote monitoring system.
- 1.9. The supplied materials should be strictly as per specifications mentioned in the RFP Document / Bid and bidder shall submit an undertaking in this regard, otherwise it shall be liable for rejection. In case any defective material or any type of substandard material is supplied, the material will be rejected

and it will be the responsibility of the Contractor for taking back the rejected materials at its own cost within fifteen days from the date of communication of rejection. Discom/beneficiary shall not be responsible for security/safety of the materials rejected. Any type of fittings, accessories, assemblies, essentially required components, which are not described or mentioned in RFP documents, shall have to be supplied by the Contractor as per NABL/MNRE / BIS / BEE Standards & Practices as applicable at his own cost.

- 1.10. Defective materials will not be accepted under any conditions and shall be rejected outright without compensation. The Contractor shall be liable for any loss/damage sustained by Discom due to defective work. The Contractor shall replace the defective material at his own expenses to the satisfaction of Discom. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of the materials.
- 1.11. There should be provision of remote monitoring on all systems through remote monitoring system. Such system shall be with the latest software/hardware configuration and data connectivity for online/ real time remote monitoring, subject to availability of service network. In areas where internet services are not available, the data shall be made available through data logger. These systems should be supplied and maintained by the Contractor for 5 years.
- 1.12. The System shall have provision for interfacing these data on Discom's server and portal in future/ as desired by Discom. Till then, access codes to all systems installed by the Contractor shall be given to Discom. The system shall store the data internally and it shall have a provision for authorized access through appropriate communication port for reading/ downloading such data locally. This will facilitate capturing information which might not get transmitted to the servers due to communication constraints.
- 1.13. The Contractor shall not assign, sublet or transfer the contract or any part thereof to any party without the prior express consent of the Discom. In the event of Contractor contravening this condition, Discom shall be entitled to place the Contract elsewhere on the Contractor's risk and cost and the Contractor shall be liable for any loss or damage, which Discom may sustain due to the consequences arising out of such replacing of the Contract.
- 1.14. In the event of any of the breach of the conditions of the contract at any time on the part of the Contractor, the contract may be terminated by the competent authority of Discom without any compensation to the Contractor. All Payments due shall be forfeited.
- 1.15. **Five years Guaranty / Comprehensive Maintenance Contract (CMC) and Insurance:**
 - a) It is mandatory on the part of Contractor(s) for providing post installation CMC services for maintaining and monitoring the commissioned SPV Pumps up to the period of 5 years from the date of commissioning. The date of CMC will begin from the date of commissioning of the SPV Pump.
 - b) For carrying out the maintenance service during the Guaranty / CMC effectively, the Contractor shall establish at least one local service center at each district where number of works commissioned by Contractor are more than or equal to one hundred (100). The bidder will maintain the records of maintenance / six monthly visits in the enclosed format. As the maintenance facility is to be provided in the Guaranty of CMC, hence no additional payment will be made by Discom for maintaining the above inventory at the service center.
 - c) CMC of system shall include remote monitoring system and its maintenance under CMC tenure. Carrying out Maintenance of the SPV Pump System for the period of 5 years (including manpower) including Guaranty period, after successful commissioning of the systems is covered under the scope of Contractor. Provision of data download should be given with the remote monitoring system to ensure data availability in case the system is unable to transmit data to servers. In case the system is in a place where there is no Internet connectivity, it shall be the responsibility of the Contractor to visit the site every six months and take the pump performance data stored in the internal memory of the Remote monitoring unit

- and submit the same as part of the six monthly performance reports. The details of site visit submitted shall be subject to verification of the joint committee of Discom's representative , beneficiary and the Contractor.
- d) It shall be the responsibility of the Contractor to ensure 100% working status during the five year (Guaranty & CMC period). The Contractor will have to arrange all required instruments, tools, spares, trained manpower and other necessary facilities at service center and shall repair/replace all defective components such as SPV module, electronics, controller, pump, wiring etc.; at his own cost.
- e) During 5 year Guaranty / Comprehensive Maintenance Contract Maintenance service shall have two distinct components as described below.
- i. **Preventive / Routine Maintenance:** This shall be done by the Contractor at least once every six months and shall include activities such as cleaning and checking the health of the SPV Pump, tightening of all electrical connections, and any other activity that may be required for proper functioning of the SPV Pump as a whole.
 - ii. **Breakdown/Corrective maintenance:** Whenever a complaint is lodged by the user/Discom, the Contractor shall attend to the same in such a way that the problem is resolved in not exceeding seven (7) days from the date of issue of complaint letter.
- f) It is mandatory that the Contractor shall submit a certificate, about the rectification/replacement work done, signed by the concerned beneficiary(s), to the Nodal officer of discom failing which it will be assumed that the Contractor has not performed its duties & action will be taken as per terms & conditions of the RFP.
- g) If the bidder fails to repair the systems against the complaint of breakdown / Corrective maintenance to ensure working status during 5 years Guaranty and CMC period, then such repairs and maintenance shall be done by discoms at the risk and cost of the Contractor and all such expenses shall be recoverable from the Contractor.
- h) Performance monitoring during Guaranty / CMC period: During CMC period, performance monitoring of all the systems installed under the RFP shall be done using the data obtained from remote monitoring provisions in the systems.
- i) The contractor will provide insurance for five years to the complete pumping system supplied, installed and commissioned. This insurance shall include the theft also. The contractor shall assist the beneficiary to file insurance claim and shall be responsible to bring an insurance claim to a final settlement.

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SECTION-V

TECHNICAL SPECIFICATION SOLAR PHOTO VOLTAIC AC/DC, SURFACE & SUBMERSIBLE WATER PUMPING SYSTEMS AGAINST TN-01

MINIMUM TECHNICAL REQUIREMENTS / STANDARDS

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

- (i) Solar PV Modules
- (ii) Solar pump controller/Inverter
- (iii) Solar Motor-Pump Set
- (iv) Module Mounting structure with manual tracking system
- (v) Suction/delivery pipe (HDPE /GI/PVC)
- (vi) Cable as per requirement
- (vii) Earthing
- (viii) Remote monitoring system
- (ix) Installation & commissioning

SPV panel (array), should be mounted on a suitable structure with a provision of three times manual tracking, AC/DC, Surface / submersible Motor pump set with a suitable inverter/controller with a provision of remote monitoring of the pump, electronics (MPPT, Inverter, Electronics Protections), interconnected cables, on-off switch, G.I./HDPE /PVC riser pipe / suction pipe & all required accessories, fittings.

Components and parts used in the SPV water pumping system including the PV modules, pumps, metallic structures, cables, junction box, switch, Electronics could include Maximum Power Point Tracker (MPPT), Inverter and Electronic Protection etc. should confirm to the MNRE/BIS / IEC / international specifications, wherever such specifications are available and applicable.

GENERAL:

- Option for variable operating head from 10-100 m
- Solar panels will be connected to submersible/surface AC/DC pumps directly.
- The system should be suitable for 100mm and above/onward bore size.
- Riser Pipe / Suction pipe shall have G.I./HDPE/PVC pipe confirming to IS 1239 / IS4984 standard.
- Cable should be as per IS 694 duly ISI marked
- Junction Boxes/Enclosures, as per IP 54 (for outdoor)/IP21 (for indoor) specifications
- Protections required
 - a. Dry run protection
 - b. Over and under voltage protection
 - c. Overload Protection
 - d. Temperature Protection

- 2.0** Minimum Technical requirement/standard for off-grid/Stand –Alone solar photovoltaic (PV) power plants/systems to be deployed under the national solar mission (as per MNRE ordered dated 16.06.10)

Item/component	Applicable IEC/equivalent BIS standard	
	Standard Description	Standard Number
PV Modules:Crystalline Silicon Terrestrial PV Modules	Must conform to the latest edition of IEC/equivalentBIS standards for module design qualification and type approval	IEC61215 IEC61415/IS14286 IEC61730Part1&2
Power conditioners/inverters*	Efficiency Measurements Environmental Testing	IEC61683, IEC600682(6,21,27,30,75,78)
Charge controller/MPPT units*	Design Qualification Environmental testing	IEC61093, IEC600682(6,21,27,30,75,78)
Cables	General test and measuring methods PVC insulated cables for working voltage up to and including 100 V-Do ,UV resistant for outdoor installation	IEC60189 IS694/IS1554 IS/IEC69947
Switches/circuit Breakers/connectors	General requirements connectors safety	IS/IEC60947 part I,II,III
Junction Boxes/enclosure	General Requirements	IP65(for outdoor)/IP21(for Indoor)IEC 62208
SPV System Design	PV Stand –alone system design verification	IEC62124
Installation Practices	Electrical installation of buildings requirements for SPV power supply system	IEC60364-7-712

- Must additionally conform to the relevant national /international electrical safety standards.
- ** Also refer Addendum No. 32/49/2010-11-PVSE dated 19.08.2010

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

3. INTRODUCTION

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

A. PV array :

- Capacity in the range of 200 Wp to 5 KWp .
- PV array should be mounted on a suitable structure with a provision of tracking the sun

B. Motor Pump Set (Surface or submersible) :

- D.C. Motor Pump Set (with Brushes or Brush less D.C.)

OR

- A.C. Induction Motor Pump set with a suitable Inverter

C. Electronics :

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

D. Interconnect Cables

E. "On-Off" switch.

4. PERFORMANCE SPECIFICATIONS AND REQUIREMENTS (DUTY CYCLE)

Solar PV Water Pumps with PV array capacity in the range of 3 kWp to 5 KWp may be installed on a suitable bore-well, open well, Water Reservoir, Water stream, etc. Under the "Average Daily Solar Radiation" condition of 7.15 KWh/ sq.m on the surface of PV array (i.e. Coplanar with the PV Modules), the minimum water output from a Solar PV Water Pumping System at different "Total Dynamic Heads" should be as specified below:

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

1. 100 liters of water per watt peak of PV array, from a Total Dynamic Head of 10 metres (Suction head, if applicable, minimum of 7 metres) and with the shut off head being at least 12 metres.
2. 50 liters of water per watt peak of PV array, from a Total Dynamic Head of 20 metres (Suction head, if applicable, up to a maximum of 7 metres) and with the shut off head being at least 25 metres.
3. 35 liters of water per watt peak of PV array, from a Total Dynamic Head of 30 metres and the shut off head being at least 45 metres.
4. 21 liters of water per watt peak of PV array, from a Total Dynamic Head of 50 metres and the shut off head being at least 70 metres.
5. 14 liters of water per watt peak of PV array, from a Total Dynamic Head of 70 metres and the shut off head being at least 100 metres.
6. 9.5 liters of water per watt peak of PV array, from a Total Dynamic Head of 100 metres and the shut off head being at least 150 metres.

The actual duration of pumping of water on a particular day and the quantity of water pumped could vary depending on the solar intensity, location, season, etc. Indicative performance specifications for the Shallow and Deep well SPV Water Pumping Systems are given in the Table- I .

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

1. 90 liters of water per watt peak of PV array, from a Total Dynamic Head of 10 metres (Suction head, if applicable, minimum of 7 metres) and with the shut off head being at least 12 metres.
2. 45 liters of water per watt peak of PV array, from a Total Dynamic Head of 20 metres (Suction head, if applicable, up to a maximum of 7 metres) and with the shut off head being at least 25 metres.
3. 32 liters of water per watt peak of PV array, from a Total Dynamic Head of 30 metres and the shut off head being at least 45 metres.
4. 19 liters of water per watt peak of PV array, from a Total Dynamic Head of 50 metres and the shut off head being at least 70 metres.
5. 13 liters of water per watt peak of PV array, from a Total Dynamic Head of 70 metres and the shut off head being at least 100 metres.
6. 8.5 liters of water per watt peak of PV array, from a Total Dynamic Head of 100 metres and the shut off head being at least 150 metres.

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

Indicative performance specifications for the Shallow and Deep well SPV Water Pumping Systems are given in the Table- II.

4.3 PV ARRAY

The SPV water pumping system should be operated with a PV array capacity in the range of 200 Watts peak to 5,000 Watts peak, measured under Standard Test Conditions (STC). Sufficient number of modules in series and parallel could be used to obtain the required PV array power output. The power output of individual PV modules used in the PV array, under STC, should be a minimum of 200 Watts peak, with adequate provision for measurement tolerances. Use of PV modules with higher power output is preferred. Indigenously produced PV module (s) containing mono/ multi crystalline silicon solar cells should be used in the PV array for the SPV Water Pumping systems.

- 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 Bidder or Distinctive Logo.
 - b. Model Number
 - c. Serial Number

- d. Year of manufacture
- e. Project Name and Year (Discoms Solar Pumping Project 2017-18)/TN No.01
- Each PV module must use a RF identification tag (RFID), which must contain the following information:
 - a. Name of the bidder of PV Module
 - b. Model or Type Number
 - c. Serial Number
 - d. Month and year of the manufacture
 - e. I-V curve for the module
 - f. Peak Wattage of the module with volts
 - g. I_m , V_m and FF for the module
 - h. Unique Serial No and Model No of the module
 - i. Discom Solar Pumping Project 2017-18/TN No.01

4.4 MOTOR PUMP-SET

4.4.1 The SPV water pumping systems may use any of the following types of motor pump sets:

- a. Surface mounted motor pump-set
- b. Submersible motor pump set
- c. Floating motor pump set
- d. Any other type of motor pump set after approval from Test Centres of the Ministry.

4.4.2 The “**Motor Pump Set**” should have a capacity of **3 HP and 5 HP** and should have the following features:

1. The mono block DC/ AC centrifugal motor pump set with the impeller mounted directly on the motor shaft and with appropriate mechanical seals which ensures zero leakage.
2. The motor of the capacity of 3 HP and 5 HP should be AC, PMDC or BLDC type. The suction and delivery head will depend on the site specific condition of the field.
3. Submersible pumps could also be used according to the dynamic head of the site at which the pump is to be used.

4.4.3 It is recommended that all parts of the pump and the motor of the submersible pumps should be made of stainless steel. –

- **The bidders should self certify that, the pump and all external parts of motor used in submersible pump which are in contact with water, are of stainless steel.** The pumps used for solar application should have a 5 years guarantee 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.

4.4.3 The following details should be marked indelibly on the motor pump set

- Name of bidder
- Discom Solar Pumping Project 2017-18/TN No.01
- Name of the Manufacturer or Distinctive Logo
- Model Number.
- Serial Number.

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

4.4.4 **Provision for remote monitoring** of the installed pumps must be made in the controllers or the inverters either through an integral arrangement or through an externally fitted arrangement. It should be possible to ascertain the daily water output, the power generated by the PV array, the UP TIME of the pump during the year, Number of days the pump was unused or under breakdown/repairs. All expenditure including SIM charge up to 5 year will have to be borne by supplier.

Detail of RMM is as under –

- SPV water pumping systems shall have online Remote Monitoring Mechanism (RMM) and the SPV water pump supplier would make provision for monitoring the performance of SPV water pump till the warranty period.
- The channels for remote communication and other communication device/equipment associated with RMM shall be provided by the SPV water pump Supplier.
- The RMM should have following features :- Web portal to view on line data such as voltage, current, power, energy generated and pump on/off duration.

Provision for generation of various reports in the printable format.

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

Provision for data export in standard format.

Historical data made available in server for report generation.

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

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

S.N.	Parameter Name	Unit	Result	Data (DD/MM/YY)
1	Maximum Voltage (Vmax)	Volt		
2	Maximum Current (I Max)	Amp		
3	Power Generated by PV Array (Pmax)	Watt		
4	Total Water output	Ltr		
5	Pump on/off			

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

4.5. MOUNTING STRUCTURES AND TRACKING SYSTEM

The PV modules should be mounted on metallic structures of adequate strength and appropriate design, which can withstand load of modules and high wind velocities up to 150 km per hour/suitable for the wind condition of area where system is to be installed. 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. In auto tracking system there must be a provision of manual tracking in case of failure of auto tracker. For manual tracking, arrangement for seasonal tilt angle adjustment and three times manual tracking in a day should be provided.

The structure design (along with the civil work) declared by the bidder should technically be full proof/ sufficiently strong against the prevailing wind load. The bidder will be fully responsible for any damages caused by high wind velocity within guarantee period. The parameters of prevailing wind speed, soil conditions, load and upward lift should be taken care of while preparing the design and the same is required to be mentioned on design. However bidder shall ensure that mounted structure efficient, strong enough to sustain load and is capable against high wind velocity.

5.0 ELECTRONICS AND PROTECTIONS

1. Maximum Power Point Tracker (MPPT) should be included to optimally use the Solar panel and maximize the water discharge.
2. Inverter could be used, if required, to operate an A.C. Pump. The inverter must have IP 54 protection or must be housed in a cabinet having at least IP54 protection
3. Controller for BLDC motor driven pumps, if required be used. The controller must have IP 54 protection or must be housed in a cabinet having at least IP 54 protection.
4. Adequate protections should be incorporated against dry operation of motor pump set, lightning, hails and storms.
5. Full protection against open circuit, accidental short circuit and reverse polarity should be provided.
6. ***Earthing of the system should be made with MS Rod 20 mm dia, 3 meter length along with G.I wire 8 SWG. Earthing shall generally be carried out in accordance with the requirements of Indian Electricity Rules, 1956.***

6.0 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, contractor/inverter and the motor pump set.

7.0 OTHER ASSESSORIES

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

One Home lighting system and fencing will be the integral part of system in the same assistance level. The firm will declare overall efficiency of the system.

- Supplier will have to provide fencing mandatory of the solar system to ensure the security and safety with following specification(Angle iron (with red oxide and Black paint coating):-35X35X5 mm
- Distance between two polls 2.5 mtr. with corner angle iron support. Fencing height-5 ft
- Gate size – 3x5 ft. (with lock provision) Foundation of cement & concrete (1x1x1 5ft.)
- Set back (from module last point) (1 mtr. North, 2 mtr. South, 2 mtr. East – West)) Thickness(2mm) Mesh wire or 16 gauge thickness barbed wire

8.0 Guarantee

8.1 Solar pumping set shall be providing with 10 years after sells services (it include initial 5 years guarantee period)

8.2 The PV modules must be warrantee for out put 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 guarantee for 5 years. Required spares for trouble free operation during the warrantee period should be provided along with the system

9.0 Notes

Wherever the “Water table” or the level of water in the reservoir or the water source (e.g. Diggie) from which the water is to be pumped, is within 10 metres depth, ‘Surface Motor Pump sets” should be preferred

The type of pump set used must match the total dynamic head requirement of the site (i.e. the location at which it is installed). Moreover, it should be appropriately tested and certified by the authorized test centres of the Ministry to meet the performance and water discharge norms specified in section II above

The beneficiary may select an appropriate Model (i. e. Capacity of PV Array and Type of Motor Pump Set) as per site requirement.

Table--I

Indicative Technical Specifications

Description	With D.C Motor Pump set with Brushes or Brush Less D.C(B.L.D.C)						
	Shallow Well (surface) solar pumping systems	Solar Deep Well (submersible) pumping systems					
	Model-III	Modal-III	Model-IV	Model-V	Model-VI	Model-VII	Model-VIII
PV Array	2700 Wp	3000Wp	3000Wp	3000Wp	4800Wp	4800Wp	4800Wp
Motor capacity/ Motor Pump set type	3 HP	3 HP Submersible with electronic controller	3 HP Submersible with electronic controller	3 HP Submersible with electronic controller	5 HP Submersible with electronic controller	5 HP Submersible with electronic controller	5 HP Submersible with electronic controller
Shut off Dynamic head	25 metres	45 metres	75 metres	100 metres	70 Metres	100 Metres	150 metres
Water output*	1,35,000 litres per day from a total head of 20 mtrs	105,000 litres per day from a total head of 30 mtrs	63,000 litres per day from a total head of 50 mtrs	42,000 litres per day from a total head of 70 mtrs.	1,00,800 litres per per day from a total head of 50 mtrs.	67,200 litres per per day from a total head of 70 mtrs.	45,600 litres per per day from a total head of 100 mtrs.

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

Notes:

1. Suction head,if applicable,minimum 7 metres for shallow well (surface) solar pump system.
2. For higher or lower head/PV capacity, or in between various models: water output could be decided as per the specifications and requirements.
3. If surface pumps are used in lieu of submersible pumps, the water output must match that of the surface pumps as specified in this table.
4. Module mounting structure shall be MDS hot dipped galvanized, with a facility of manual tracking at least three times a day.

Table-II

Description	With A.C Induction Motor Pump set and a suitable inverter:									
	Shallow Well (surface) solar pumping systems				Solar Deep Well (submersible) pumping systems					
	Model-III	Model-IV	Model-V	Model-VI	Model-III	Model-IV	Model-V	Model-VI	Model-VII	Model-VIII
PV Array	2700 Wp	2700Wp	4800Wp	4800Wp	3000Wp	3000Wp	3000Wp	4800 Wp	4800 Wp	4800 Wp
Motor capacity/ Motor Pump set type	3 HP	3 HP	5HP	5HP	3 HP Submersible with electronic controller	3 HP Submersible with electronic controller	3 HP Submersible with electronic controller	5 HP Submersible with electronic controller	5 HP Submersible with electronic controller	5 HP Submersible with electronic controller
Shut off Dynamic head	15 metres	25 metres	15 metres	30 metres	45 Metres	75 Metres	100 metres	70 metres	100 metres	150 metres
Water output*	243,000 litres per day from a total head of 10 mtrs	121,500 litres per day from a total head of 20 mtrs	432,000 litres per day from a total head of 10 mtrs	216,000 litres per day from a total head of 20 mtrs.	96,000 litres per day from a total head of 30 mtrs.	57,000 litres per day from a total head of 50 mtrs.	39,000 litres per day from a total head of 70 mtrs.	91,200 litres per day from a total head of 50 mtrs	62,400 litres per day from a total head of 70 mtrs	40,800 litres per day from a total head of 100mtrs

- 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:

5. Suction head,if applicable,minimum 7 metres for shallow well (surface) solar pump system.
6. For higher or lower head/PV capacity, or in between various models: water output could be decided as per the specifications and requirements.
7. If surface pumps are used in lieu of submersible pumps, the water output must match that of the surface pumps as specified in this table.
8. Module mounting structure shall be MDS hot dipped galvanized, with a facility of manual tracking at least three times a day

Financial Bid (To be filled only on eprocurement site)

E-Tendereing system

Government of Rajasthan

Tender Inviting Authority: Jaipur

vidyut Vitran Nigam Ltd.

Name of work:- Discom Solar Pumping Project 2017-18 in

the state of Rajasthan, TN No.01

Contact No.-----

SCHEDULE OF
WORK/ITEM(S)

S. No	Description of work	Quantity	unit	Material cost (in Rs.)			erection cost (In Rs.)			Grand Total
				Basic cost	tax	Total cost	Basic cost	tax	Total cost	
1	SPV DC Surface Pumping system 3 HP with manual tracking structure including fancing, 20 Mtr. Head (Minimum)	1	Set							
2	SPV DC Submersible Pumping system 3 HP with manual tracking structure including fancing, 20 Mtr. Head (Minimum)	1	Set							
3	SPV AC Surface Pumping system 3 HP with manual tracking structure including fancing, 20 Mtr. Head (Minimum)	1	Set							
4	SPV AC Submersible Pumping system 3 HP with manual tracking structure including fancing, 20 Mtr. Head (Minimum)	1	Set							
5	SPV DC Surface Pumping system 5 HP with manual tracking structure including fancing, 20 Mtr. Head (Minimum)	1	Set							
6	SPV DC Submersible Pumping system 5HP with manual tracking structure including fancing, 20 Mtr. Head (Minimum)	1	Set							
7	SPV AC Surface Pumping system 5 HP with manual tracking structure including	1	Set							

	fancing, 20 Mtr. Head (Minimum)										
8	SPV AC Submersible Pumping system 5HP with manual tracking structure including fancing, 20 Mtr. Head (Minimum)	1	Set								
9	Additional cost of 50 m head over 20 m head	1	Set								
10	Additional cost of 75m head over 20 m head	1	Set								
11	Additional cost of 100 m head over 20 m head	1	Set								
12	Single axis auto tracker system, Additional cost of over manual tracking system,	1	Set								

NOTE

1. For evaluation of financial bid, weightage shall be given on the rates of 3 HP to 5 HP in the ratio of 1:6, (i.e. 3 HP rate x 1/7 + 5 HP rate x 6/7) after that L1 shall be decided on the total of all 12 items.
2. Rates quoted shall be Firm, including Survey, Supply, Installation, commissioning and testing of different components of Solar Water Pumping System at site, including 5 Yers Guarantee/CMC, safe packing, forwarding, loading, unloading, transportation charges, insurance charges (which includes theft also) including GST and taxex as aplicable.
3. The bid shall be considered only if rates for all 12 Nos Items/works as above are quoted as shall be considered non resposable.

SCHEDULE-F

OPTION FOR LOT-WISE PARTICIPATION

Bidder is required to indicate the Lot for which he intends to participate. EMD should also be furnished according to No. of Lots for which bidder wishes to participate. (each lot contains 1000 pumps)	Yes / No.
Lot-1	
Lot-2	
Lot-3	
Lot-4	
Lot-5	
Lot-6	
Lot-7	
Lot-8	
Lot-9	
Lot-10	

SIGNATURE & SEAL OF THE BIDDER

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