

e-tender Notice

Uttar Pradesh New and Renewable Energy Development Agency, (UPNEDA)

(Department of Additional Sources of Energy, Govt. of Uttar Pradesh)
Vibhuti Khand, Gomti Nagar, Lucknow U P

Tel.No. 91-0522-2720652, TeleFax: 0522-2720779, 2720829
Website:<http://upneda.org.in> E-Mail: compneda@rediffmail.com

UPNEDA invites Online Bids from Prospective Bidder through e-tendering for the supply, installation, commissioning and 5 years comprehensive warranty maintenance of following item at various sites in Uttar Pradesh, as per the details given in e -tender document.

Sl. no	Item	e-tender No.	Quantity	Fee of e-tender Document	Earnest Money
1	1.1 KW Solar Power plant along with Fan, DC submersible water pump and RO water purifier System.	- e-tender NO.- UPNEDA/SPV/SPROW/2019-20/02	Approximate 1000 numbers	Rs 35000.00 + GST 18%= 41300.00	Rs 26.5 Lakhs

The tender document is available at e-Procurement website <http://etender.up.nic.in> from. Interested bidders may view, download the e-Bid document, seek clarification and submit their e-Bid online up to the date and time mentioned in the table below:

(a)	e-Bid submission end date & Time	24.6.2019 upto 6.30 PM
(b)	Online technical e-Bid opening date & time	25.6.2019 at 12.30PM
(c)	Online financial e-Bid opening tentative date & time (Only of technically qualified bidders)	31.6.2019 at 3.30 PM or as specified after opening of technical bid
(d)	Venue of opening of technical & financial e-Bids	UPNEDA Head Office, Vibhuti Khand, Gomti Nagar, Lucknow-226016

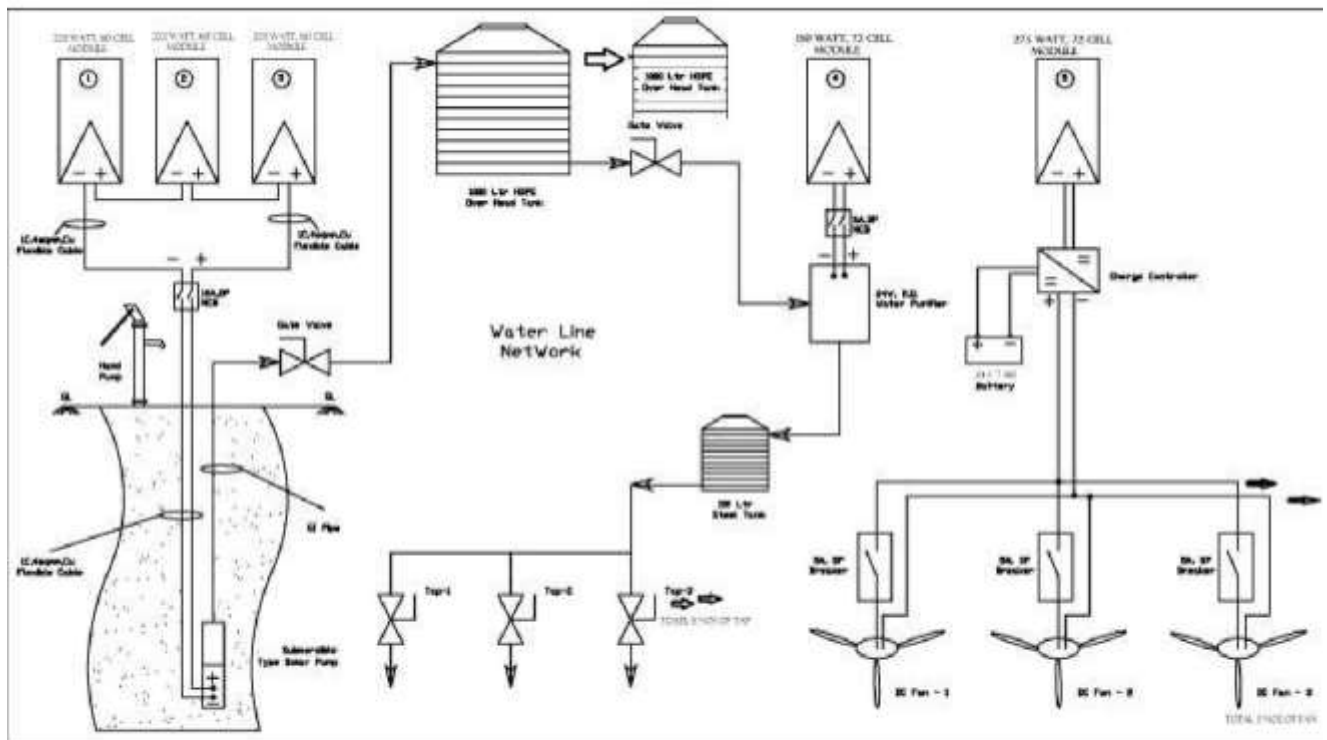
The bidders need to submit the proof/cost of e-Bid document fees and EMD as stated in the above table through Demand Draft as bid documents fees and bank guarantee as EMD in favor of Director Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA), payable at LUCKNOW. The scanned copy of the Demand Draft and Bank guarantee must be uploaded along with the e-Bids. The original Demand Draft and bank guarantee along with the hard copy of the technical Bid document with enclosures duly signed by bidders must reach the office of UPNEDA at Vibhuti Khand, Gomti Nagar Lucknow before opening date and time of technical e-Bid failing which, tender shall not be considered. Numbers of the system mentioned as above may vary. The Director, Uttar Pradesh New and Renewable Energy Development Agency, (UPNEDA) reserves the right to reject any or all tenders without assigning any reason thereof. The decision of Director UPNEDA will be final and binding.

Director
UPNEDA

e-TENDER DOCUMENT

SUPPLY, INSTALLATION, COMMISSIONING AND 5 YEARS COMPREHENSIVE WARRANTY MAINTENANCE OF 1.1 KW SOLAR PV POWER PLANT ALONG WITH FAN, WATER PUMP AND RO SYSTEM IN VARIOUS DISTRICT OF UTTAR PRADESH

e-tender NO.- UPNEDA/SPV/SPROW/2019-20/02



Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA)

(Deptt. of Additional Sources of Energy, Govt. of U.P.)

Vibhuti Khand, Gomti Nagar, Lucknow-U P

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Uttar Pradesh New and Renewable Energy Development Agency, (UPNEDA)

(Department of Additional Sources of Energy, Govt. of Uttar Pradesh)

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Director
UPNEDA

2. Covering Letter:

FROM:-

(Full name and address of the Bidder)

.....
.....

To:

The Director ,
Uttar Pradesh New and Renewable Energy
Development Agency (UPNEDA)
Vibhuti Khand, Gomti Nagar, Lucknow- U. P.

Subject: -Offer in response to e-tender specification No: .- UPNEDA/SPV/SPROW/2019-20/02

Sir,

We hereby submit our offer in full compliance with terms & conditions of the above e-tender. A blank copy of the e-tender (Excluding financial bid) duly signed on each page is also submitted as a proof of our acceptance of all specifications as well as terms/ Conditions.

We confirm that, we have the capability supply, install and carryout 5 years comprehensive warranty maintenance of -----numbers of system in 4 months. (Supporting document in proof of capacity should be attached)

(Signature of Bidder)
With Seal

3. Check list of Annexures

(The following information/documents are to be annexed and flagged by the Bidders along with the BID)

S. N.	Annexure No	Particulars	Yes/No, Flag No.
1.	Annexure-I(a) Annexure-I(b) Annexure-II	<p>Details of Tender document fees (Demand Draft no, date, amount and bank name) for Rs. 41300/-</p> <p>Details of Earnest money (bank guarantee no. and date, (valid for four months)</p> <p>A Registered Manufacturing Company/Firm/ Corporation in India of- SPV Cells / Modules or PV System Electronics or Submersible Pumps or RO water purifier</p> <p style="text-align: center;">OR</p> <p>SPV System Integrator for off grid system -- At least -275KW Solar Photovoltaic off grid Systems should have been installed/commissioned in Government in which at least 50 KW in Solar water pumping/Solar RO water system. (copy of the order and certificate indicating its successful Execution along with CA certificate to be enclosed)</p>	
3.	Annexure-III III(a) III(b) III(c) III(d) III(e) III(f) III (g)	<p>Following Test Certificates & Reports for components specified in technical bid</p> <p>i. SPV Modules</p> <p>a) IEC 61215 test report for offered Modules(Minimum Validity till March 2020)</p> <p>b) IEC 61730 Part 1 & 2(Minimum Validity till March 2020)</p> <p>c) STC Performance Report with IV curve – for offered module from MNRE authorized test Centre(Issued on or after 1st April,2016)</p> <p>ii. Pump – The pump should be tested by NISE /MNRE or NABAL authorized test Centre(Issued on or after 1st April,2016)</p> <p>iii. R O Water- Water test certificate from NABAL accredited lab. (Issued on or after 1st April,2016)</p> <p>iv. Fan: Should be tested with NABAL Accredited lab(Issued on or after 1st April,2016)</p> <p>v. Lifepo4 Battery : Should be tested with NABAL Accredited lab(Issued on or after 1st April,2016)</p>	
5.	Annexure- Annexure-V	<p>A copy of valid GST registration certificate</p> <p>Overall Average Annual Turnover of the Company/Firm/ Corporation in the last three financial years 2015-16. 2016-17 and 2017-18(A summarized sheet of turnover of last three Financial Years certified by registered CA)</p>	
6	Annexure- VI	<p>A summarized sheet of work completed in last three financial year certified by registered CA should be at least Rs. 662 Lakhs.</p>	

(Signature of Bidder) With Seal

*Please flag the annexure and write flag number in the box.

Note:- Bids received without supporting documents for the various requirements mentioned in the tender document may be rejected.

4. Particulars of e-tender

1.	e-tender no.	UPNEDA/SPV/SPROW/2019-20/02
2.	Particulars of the work	SUPPLY, INSTALLATION & COMMISSIONING AND 5 YEARS COMPREHENSIVE WARRANTY MAINTENANCE OF 1.1 KW SOLAR POWER PLANT ALONG WITH FAN, WATER PUMP AND RO SYSTEM IN VARIOUS PRIMARY SCHOOL/VILLAGES OF UTTAR PRADESH
3.	Completion Period of work	Within 4 months for up to 100 Systems and 6 month for more than 100 systems from the date of award of work.
4.	Period of validity of rates for acceptance	3 months from opening of financial bid
5.	Place of opening of e-tender	UPNEDA, Head Office, Vibhuti Khand, Gomti Nagar, Lucknow, Uttar Pradesh.

- Bidders are advised to study the tender Document carefully. Submission of e-Bid against this tender shall be deemed to have been done after careful study and examination of the procedures, terms and conditions of the tender Document with full understanding of its implications.
- The e-Bid prepared in accordance with the procedures enumerated in ITB Clause 15 of Section-I should be submitted through e-Procurement website <http://etender.up.nic.in>.
- The e-Bids will be electronically opened in the presence of bidder's representatives, who choose to attend at the venue, date and time mentioned in the above table. An authority letter of bidders' representative will be required to be produced.
- In the event of date specified for e-Bids opening being declared a holiday for UPNEDA's office then the due date for opening of e-Bids shall be the following working day at the appointed time and place. However, Director, UPNEDA reserves the right to extend the date of opening of Financial Bid in unavoidable circumstances.
- All the required documents including Price Schedule/BOQ should be uploaded by the e-Bidder electronically in the PDF/XLS format. The required electronic documents for each document label of Technical (Fee details, Qualification details, e-Bid Form and Technical Specification details) schedules/packets can be clubbed together to make single different files for each label. All the enclosures should be scanned and uploaded with bid.
- The companies/firms who are registered at e-Procurement portal for e-tendering would be eligible for participating in this e-tender. All companies/firms who have not registered themselves may get registered with U.P. Electronics Corporation Ltd. (UPLC), 10, Ashok Marg, Lucknow (UP) for e-tendering. The companies/firms may contact the UPLC officials on phone numbers 0522-2286809, 0522-2288750 (O) 0522-4130303 (Extn: 303, 304 & 307), for their Registration/Digital Signature Certificate related queries.

(Signature of Bidder)
With Seal

5. GENERAL PARTICULARS OF BIDDER

1	Name of Bidder	
2	Postal Address	
3	Mobile no.	
4	Telephone, Telex, Fax No	
5	E-mail	
6	Web site	
7	Name, designation and Mobile Phone No. of the representative of the Bidder to whom all references shall be made	
8	Name and address of the Indian/foreign Collaboration if any	
9	Have anything/extra other than price of items (as mentioned in price Schedule) been written in the price schedule.	
10	Have the Bidder to pay arrears of income tax? If yes up to what amount?	
11	Have the Bidder ever been debarred By any Govt. Deptt. / Undertaking for undertaking any work?	
12	Monthly supply and installation capacity of Systems.	
13	Details of offer (please mention number of pages and number of Drawings in the hard copy)	
14	Reference of any other information attached by the bidder (please Mention no. of pages & no. of drawings)	

(Signature of Bidder)
with Seal

6. DECLARATION BY THE BIDDER
(REGARDING e-tender NO. UPNEDA/SPV/SPROW/2019-20/02)

I/We _____ (hereinafter referred to as the Bidder) being desirous of e-tendering for the work under the above mentioned e-tender and having fully understood the nature of the work and having carefully noted all the terms and conditions, specifications etc. as mentioned in the e-tender document,

DO HEREBY DECLARE THAT

1. The Bidder is fully aware of all the requirements of the e-tender document and agrees with all provisions of the e-tender document.
2. The Bidder is capable of executing and completing the work as required in the e-tender.
3. The Bidder accepts all risks and responsibilities directly or indirectly connected with the performance of the e-tender.
4. The Bidder has no collusion with other Bidders, any employee of UPNEDA or with any other person or firm in the preparation of the bid.
5. The Bidder has not been influenced by any statement or promises of UPNEDA or any of its employees, but only by the e-tender document.
6. The Bidder is financially solvent and sound to execute the work.
7. The Bidder is sufficiently experienced and competent to perform the contract to the satisfaction of UPNEDA.
8. The information and the statements submitted with the e-tender are true.
9. The Bidder is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central Government that may affect the work, its performance or personnel employed therein.
10. The Bidder has not been debarred from similar type of work by UPNEDA and or Government undertaking/ Department.
11. No any criminal case against bidder is pending in any court of competent jurisdiction in anywhere.
11. This offer shall remain valid for acceptance for 3 Months from the date of opening of financial bid of e-tender.
12. The Bidder gives the assurance to execute the e-tendered work as per specifications terms and conditions.
13. The Bidder confirms the capability to supply, install and carryout 5 years comprehensive warranty maintenance of tendered Systems in three month.
14. The Bidder also confirms that they can supply, install and commission minimum 100 numbers of systems within 4 months and maximum-----nos of system within 6

(Signature of Bidder)
with SEAL

PART-2 : INSTRUCTION TO BIDDERS

SECTION 1: THE TENDER DOCUMENT

1.1 CONTENT OF e-tender DOCUMENT

1.1.1 The e-tender procedure and contract terms are prescribed in the e-tender Documents. In addition to the e-tender Notice the Bidding documents include.

PART A

part-1

- 1 e-tender Notice
- 2 Covering Letter
- 3 Checklist of Annexure
- 4 Particulars of e-tender
- 5 General Particulars of Bidder
- 6 Declaration by Bidder

Part – 2: Instruction to Bidders

- Section -1 Contents of e-tender document
- Section -2 Eligibility condition
- Section-3 Preparation of e-tender
- Section-4 Submission of e-tender
- Section -5 e-tender opening and evaluation
- Section-6 Procedure for Finalization of Bid

Part – 3: General Condition of Contract

Part – 4: Scope of Work & Technical specifications

Part – 5: Details of Warranty

Part – 6: Technical Bid

PART – B: Financial Bid

The Bidder is expected to examine all instructions, forms, terms and specifications as mentioned in the e-tender document. Failure to furnish all information required by the e-tender documents or submission of a bid not substantially responsive to the Bid Document in every respect will be at the Bidder's risk and is likely to result in out-right rejection of the e-tender

1.2 LOCAL CONDITIONS

It shall be imperative on each bidder to fully inform him of all local conditions and factors, which may have any effect on the execution of the works covered under these documents and specifications. UPNEDA shall not entertain any request for clarifications from the Bidder, regarding such local conditions

1.3 CLARIFICATION:

A prospective Bidder requiring any clarification of the e-tender Documents may contact UPNEDA in writing or by Fax at the UPNEDA's mailing address indicated in the Invitation for e-tender.

All are requested to remain updated with the website. No separate reply/ intimation will be given elsewhere. Verbal clarifications and information given by the UPNEDA or its employees or its representatives shall not be in any way entertained.

The Bidder(s) or their authorized representative(s) is/are invited to attend pre-bid meeting(s),

UPNEDA will make all efforts to respond to the queries during the Pre Bid Meeting to be held on 12 th Jun, 2019 at 12.30 PM at UPNEDA Head Office, Lucknow. The purpose of the pre-bid meeting will be to clarify any issues regarding the Bid. Bidders are requested to submit such issues latest by 11th June 2019 up to 5:00 PM through e-mail (compneda@rediffmail.com/dirupneda@gmail.com)

Enquiries/clarifications may be sought by the Bidder from:

Director,
Uttar Pradesh New & Renewable Energy Development Agency,
Vibhuti Khand, Gomti Nagar, Lucknow
Phone: 0522-2720652
Fax: 0522-2720779, 2720829
Email: compneda@rediffmail.com

1.4 AMENDMENT OF e-tender DOCUMENTS

At any time prior to the submission of the e-tender the UPNEDA may for any reason, whether at its own initiative or in response to a clarification requested by the Bidder, modify the e-tender documents by amendments. Such document shall be made available on websites: <http://etender.up.nic.in>. All are requested to remain updated with the website. No separate reply/intimation will be given elsewhere.

(Signature of Bidder)
with SEAL

SECTION 2: ELIGIBILITY CONDITIONS

Eligibility Conditions for Bidders

1. Minimum Eligibility

Conditions: The Bidders should be

1.1.1 A Registered Manufacturing Company/Firm/ Corporation in India of-
SPV Cells / Modules or PV System Electronics or Submersible Pumps or RO water purifier
(Conforming to relevant National / International Standards)

OR

1.1.2 A PV System Integrator (At least 275 KW of Solar Photovoltaic off grid Systems should have been installed / commissioned in which 50 KW should be in solar water pumping/Solar RO water installation)*

1.2 Cumulative Experience* (for year 2015-16. 2016-17 and 2017-18) of the Bidder in executing contracts of Solar Photovoltaic Systems (Installed & Commissioned) should be at least Rs 662 Lakhs.

1.3 The Bidder should have valid GST registration Number. A copy of which should be enclosed

1.4 Overall Average Annual Turnover of the Company/Firm/ Corporation in the last three financial years FY 2015-16. 2016-17 and 2017-18 should be at least Rs. 795 Lakh. (This must be the individual Company's turnover and not that of any group of Companies). (Details of turnover of last three years with average turnover certified by registered Chartered Accountant should be compulsorily enclosed

*Bidder's experience should be in supply, installation/commissioning (contracts executed, completed and handed over) of Solar Photovoltaic Systems for: MNRE supported Schemes / Programmes, OR Any Government Organisation/ Agency/ SNA/PSU)- **CA Certificate is required.**

(Signature of Bidder)
with SEAL

SECTION 3: PREPARATION OF e-tender

3.1 LANGUAGE OF BID AND MEASURE

- 3.1.1 The e-tender prepared by the Bidder and all correspondence and documents relating to the bid exchanged by the Bidder and UPNEDA shall be written in the English Provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation of its pertinent passages in which case, for purpose of interpretation English Units of measurement shall be MKS system.

3.2 DOCUMENTS COMPRISING THE BID

- 3.2.1 The e-tender prepared by the Bidder shall comprise the following components
- (a) Covering letter as provided in e-tender document.
 - (b) General particulars of bidder, as provided in e-tender document.
 - (c) Declaration by The Bidder, as provided in e-tender document
 - (d) Documentary evidence establishing that the bidder is eligible to Tender and is qualified to perform the contract if its tender is accepted. Check list of Annexures as provided in e-tender document
 - (e) A blank copy of the in e-tender document signed on each page, as a confirmation by the Bidder to accept all technical specifications / commercial conditions along with all necessary enclosures.
 - (f) Authorization letter of the Bidder, for the person representing his Company/Firm/ Corporation, that he is authorized to discuss and with specific mention of this e-tender

3.3 BID PRICE

- 3.3.1 The Bidder shall indicate prices on the appropriate Financial Bid schedule.

3.3.2 DUTIES AND TAXES

The price quoted should include all taxes what so ever as applicable. A Bidder shall be entirely responsible for all taxes, duties, license fees etc. All taxes as per Government income tax & other tax norms will be payable by the Bidder. Central & State GST and TDS will be deducted from the payments of the Bidder as per the prevalent laws and rules of Government of India and Government of Uttar Pradesh in this regard and as applicable.

- 3.3.3 If any new tax/duty is belied during the Contract period, the same shall be borne by the Contractor exclusively.

3.4 BID CURRENCIES

- 3.4.1 Prices shall be quoted in Indian Rupees (INR) only

3.5 SECURITY DEPOSIT/ PERFORMANCE GUARANTEE:

- 3.6 The successful Bidders, who execute the agreement with UPNEDA for the work, shall have to furnish a security amount equivalent to 10% of total value of the contract in the form of Bank Guarantee valid for a period of 18 months from the date of execution of agreement. The bank guarantee may be issued by a nationalized bank or scheduled bank of RBI. Bank Guarantee shall be in favour of "Director, UPNEDA". The aforesaid Bank Guarantee shall be furnished prior to the execution of agreement. The performance Bank Guarantee shall be released after completion of installation and commissioning of all systems. The performance security is exempted for Micro and Small Industry setup registered in Uttar Pradesh. The DIC/NIC certificates for MSME in this regard should be submitted.

3.7 PERIOD OF VALIDITY OF e-tender

- 3.6.1 Validity of the offer should be 3 months from the date of opening of the financial bid of the e-tenders. Without this validity the e-tenders will be rejected.

- 3.6.1.2 Once the agreement is signed valid for 12 month. During such period separate work order will

be placed to firm which shall be binding to the firm. 12

3.6.2 In exceptional circumstances; the UPNEDA will solicit the Bidder's consent to an extension of the period of validity. The request and the response thereof shall be made in writing. The contract performance security provided under clause 3.5.1 above shall also be suitably extended.

3.7 BID SECURITY (Earnest Money)

3.7.1 The bidder shall furnish, as part of its bid, bid security of Rs. 26.50 lakh in the form of Bank guarantee issued by a nationalized bank or scheduled bank of RBI. The bank guarantee shall be valid for a period of 4 (Four) months from the opening of technical bid. The earnest money is exempted for Micro and Small Industry setup and registered in Uttar Pradesh. The DIC /NIC certificates issued from Directorate of industries/ NSIC is required for Micro and Small firms. The certificate should be submitted with tender document to get the exemptions.

3.7.2 Any bid not secured with the tender fee and earnest money will be rejected by the UPNEDA as non-responsive.

3.7.3 No Interest shall be payable on the amount of earnest money and the same will be released, after the e-tenders have been decided, to those Bidders who fail to get the contract.

3.7.4 The e-tender security (earnest money) may be forfeited:

a) If a Tenderer withdraws its e-tender during the period of e-tender validity specified by the Bidder in the e-tender.

b) If the Successful Bidder fails to sign the Agreement within stipulated period.

3.7.5 EMD of successful bidder shall only be released after signing of Agreement and submission of performance guarantee as per clause 3.5.1

3.8 FORMAT AND SIGNING OF e-tender

3.8.1 The bid must contain the name, residence and places of business of the persons making the e-tender and must be signed and sealed by the Bidder with his usual signature. The name and designations of all persons signing should be typed or printed below the signature.

3.8.2 e-tender by corporation/ company must be signed with the legal name of the corporation/ company/firm by the 'President', Managing director or by the 'Secretary' or other designation or a person duly authorized

3.8.3 The original copy of the e-tender shall be typed or written in indelible ink and shall be signed by the Bidder or a person duly authorized to bid and bidder to the contract. The letter of authorization shall be submitted along with power-of-attorney. All the pages of the bid shall be initialed by the person or persons signing the e-tender.

3.8.4 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder in which case such corrections shall be initialed by the person or persons signing the e-tender.

(Signature of Bidder)
with SEAL

SECTION: 4: UPLOADING OF e-tender

4.1 Uploading of e-tender : The bid shall be uploaded online as per guide lines of U. P. Electronics Corporation Limited. (UPLC), 10, Ashok Marg, Lucknow, (Uttar Pradesh).

4.1.1 The tender must be complete in all technical and commercial respect and should contain requisite certificate, drawings, informative literature etc. as required in the specification.

4.1.2 First part (part-A) should contain technical specification, brochure literature etc. All parts of tender documents except Financial Bid should be uploaded as per e-procurement mode in due date and time. Scanned copy of Requisite earnest money in the form of Bank Guarantee/Bank Draft should be enclosed.

4.1.3 The Bidder should upload Financial Bid in Second part. Second part (part-B) should contain Financial bid only. Financial Bid should be uploaded as per e-procurement mode in due date and time. Anything in regard of financial condition, payment terms, rebate etc. mentioned in financial bid may make the tender invalid. Therefore, it is in the interest of the Bidder not to write anything extra in part-B except price.

4.1.4 The original copy of uploaded document i.e. only first part (Part-A) duly signed each pages by the bidder along with requisite earnest money original document is to be submitted by Post /courier/by hand to UPNEDA HQ before opening **of technical bid date and time**. Without this document the online technical bid of those firms will not be opened.

4.2 PERIOD OF AGREEMENT: A formal agreement for a period of 01 (one) year shall be entered into between UPNEDA and the contractor/ bidder for the proper fulfillment of the contract. The expenses of completing and stamping of the agreement shall be paid by the successful Bidder.

4.3 DEADLINE FOR SUBMISSION OF BIDS: Bids must be uploaded by the bidder in the date; time and address specified in the e-tender notice/ tender documents.

4.4 EXPENSES OF AGREEMENT: Stamp duty chargeable on the Agreement shall be borne by Successful Bidder.

(Signature of Bidder)
with seal

SECTION 5: E-TENDER OPENING AND EVALUATION

5.1 OPENING OF e-tender

The procedure of opening of the e-tender shall be as under:

5.1.1 First part (part-A) uploaded having e-tender specification and super scribed as “Technical Bid” shall be opened at the time and date mentioned in the e-tender notice by UPNEDA’s representatives in the presence of Bidders, who choose to be present.

5.1.2 Second part (Part-B) containing Financial Bid shall be opened (after obtaining clarifications and establishing technical suitability of the offer) as per schedule. Second part of only those Bidders shall be opened whose first part (part-A) shall be found technically Qualified.

CLARIFICATION OF e-tender

5.2.1 To assist in the examination, evaluation and comparison of bids the UPNEDA may at its discretion ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing.

5.3 UPNEDA reserves the right to interpret the Bid submitted by the Bidder in accordance with the provisions of this document and make its own judgment regarding the interpretation of the same. In this regard UPNEDA shall have no liability towards any Bidder. UPNEDA shall evaluate the Bids using the evaluation process specified in this document or as amended, at its sole discretion. UPNEDA’s decision in this regard shall be final and binding on the Bidders.

Signature of Bidder
with seal

SECTION-6:Procedure for Finalization of BID

6.0 The Procedure for Finalization of BID would be as follows:

6.1 Finalization of BID:

- First the Technical bids shall be opened and evaluated.
- Then the price bid of technically qualified bidders shall be opened.
- The lowest rate (i.e. L-1) shall be evaluated.

6.2 Finalization of Empanelment:

6.2.1. The lowest rate (i.e. L-1) received (and in turn approved by the competent authority) would be the “Approved Rate”. c

6.2.2. “Approved Lowest Rate” would be offered to those lowest bidders (i.e. to L-2, L-3, L-4 and L-5 only having price not more than 15% of lowest approved rates (L1) if the agree to work at L-1 approved rate will be empaneled .

6.2.3 Maximum 20 % of the total quantity purchased in three years has to be distributed equally amongst successful micro and small industries/ firms bidders. Therefore 6.5% of the total order quantity for this year shall be awarded amongst the micro and small industries qualified firm/firms at the lowest approved rate subject to their consent at to work on lowest rate and their capacity. If MSME category bidder will be lowest one (L-1) then L-1 will be awarded 50% of 6.5% of MSME work order. The remaining 50% of 6.5% of MSME quantity shall be awarded among others qualified MSME firms (i.e L2 to L5)

6.2.4 The bidder other than MSME will be awarded in remaining of 93.5% of total bid quantity. The lowest bidder other than MSME firms qualified and agreed on approved rate L-1 shall be awarded 50% of 93.5% or as per its capacity given in the bid, whichever is lower and remaining 50% of 93.5% shall be awarded equally in other empaneled bidders or as per its capacity given in the bid

6.2.5 If other than MSME category bidder will be L-1 then L-1 will be awarded 50% of 93.5% of work order. The remaining quantity shall be awarded equally among others qualified other than MSME firm.

6.2.6 Training of the users and entrepreneurs/ operators will be arranged by the contractor/ bidder.

6.3 If required UPNEDA reserves the right to negotiate with (lowest) L-1 bidder before finalization of the tender.

6.4 UPNEDA reserves the right at the time of awarding the work to increase or decrease the quantity of goods and locations of supply without any change in price or other terms and conditions.

6.5 UPNEDA reserves the right to accept any bid and to reject any or all bids.

6.6 Notification of awarding the contract:

List of successful Bidder(s) for contract shall be displayed on UPNEDA's website and shall be intimated in writing to the contractor.

6.7 CONTRACT

Before execution of the work, an agreement for execution of the work shall be signed by the Bidder with UPNEDA within 15 days of communication from UPNEDA. In case agreement is not executed within the stipulated time, earnest money will be forfeited.

Signature of Bidder

PART 3: GENERAL CONDITIONS OF CONTRACT

1.0 In the deed of contract unless the context otherwise requires:-

DEFINITIONS

1.2. "UPNEDA" shall be represented through Director of UPNEDA or his authorized representative UPNEDA shall include its successors and assignees. The "Contractor" shall mean (Successful Bidder) i.e. the person whose e-tender has been accepted by UPNEDA and shall include his legal representatives and successors.

1.3 The Agreement shall be on RATE CONTRACT basis. The work order shall be issued separately. The work shall be completed within four months from the date of placement of work order.

In case the Contractor/ Bidder fails to execute the said work within stipulated time, "UPNEDA" will be at liberty to get the work executed from the open market without calling any tender/ e-tender and without any notice to the Contractor/ Bidder, at the risk and cost of the Contractor/ Bidder. Any additional cost incurred by "UPNEDA" shall be recovered from the Contractor/ Bidder. If the cost of executing the work as aforesaid shall exceed the balance due to the Contractor/ Bidder, and the Contractor/ Bidder fails to make good the additional cost, "UPNEDA" may recover it from the Contractor/ Bidders' pending claims against any work in "UPNEDA" or in any lawful manner.

1.4 That on the request of the Contractor/ Bidder and also in the interest of the organization the "UPNEDA" is authorized to extend the stipulated period mentioned clause 1.3 above of the agreement, subject to that the request of the Contractor/ Bidder is received before the expiry of the agreement period, or any extended period granted to the Contractor/ Bidder. Maximum period of extension shall be 2 months on the same terms and conditions as contained in this Agreement.

1.5 The Agreement shall be deemed to be extended till the date of completion of last work order subject to the completion period as provided in the clause 1.3.

1.6 The Contractor, (i.e. the Successful Bidder) is not allowed to operate in the State of Uttar Pradesh through any dealer for execution of the orders placed or sublet this order to other firms. It will be the sole responsibility of the Contractor, to execute orders placed as per time schedule, and to ensure quality parameters, specifications and other requirements provided in the e-tender document and as per agreement.

1.7 In the interest of the work and the programme, agreement executed between the Contractor / Bidder and the "UPNEDA" may be extended to a mutually agreed period, if the need so arises. It shall be sole responsibility of the Contractor/ Bidder to get verified the quality & quantity of the supplied material at the site of delivery.

2 LIQUIDATED DAMAGES

2.1 If the contractor/ bidder fails to perform the services within the time periods specified in the contract (In case of delay for any reason other than due to Force Majeure conditions or any extension thereof granted to him by UPNEDA) the "UPNEDA" shall without prejudice to its other remedies under the contract deduct from the contract price as liquidated damage, a sum equivalent to 1.0% of the price of the unperformed services for each week till 04 weeks; 2.0% for next 5 to 8 weeks and 3.0 % for 9 to 10 weeks subject to maximum 18% shall be deducted on unperformed services. If maximum penalty 18% reaches UPNEDA may consider termination of the contract. If maximum penalty 18% reaches UPNEDA may assess the progress of work and take decision where the work order is to be

cancelled and debar/blacklist the firm or continue to give extension with penalty. In the case of violation of contract, UPNEDA may confiscate pending payments/ dues of the contractor/ bidder assigning specific reasons and shall also have the power to debar/ blacklist the contractor/ bidder in similar circumstances. UPNEDA may also invoke performance/security bank guarantee of 10%.

3 The Contractor/ Bidder shall have to comply with all the rules, regulations, laws and by-laws for the time being in force and the instructions if any, of the UPNEDA, in whose premises the work has to be done. "UPNEDA" shall have no liability in this regard.

4 FORCE MAJEURE

4.1 Notwithstanding any provisions contained in the Agreement the Contractor shall not be liable for the forfeiture of its Performance Guarantee, liquidated damages termination for default, if he is unable to fulfill his obligation under the Agreement due to event of force majeure circumstances.

4.2 For purpose of clause 4.1 "Force majeure" means an event beyond the control of the Contractor and not involving the contractor fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of Government either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes

4.3 However, if a force majeure situation arises, the Contractor shall immediately notify the "UPNEDA" in writing. The decision of the competent authority of UPNEDA in above conditions shall be final.

5 The High court of Judicature at Allahabad and Courts subordinate thereto, at Lucknow, shall alone have jurisdictions to the exclusion of all other courts.

6 The Contractor shall not, without the consent in writing of "UPNEDA", transfer, assign or sublet the work under the contract or any substantial part thereof to any other party

7 "UPNEDA" shall have at all reasonable time access to the works being carried out by the Contractor under the contract. All the work shall be carried out by the contractor/ bidder to the satisfaction of "UPNEDA".

8 If any question, dispute or difference what so ever shall arises between "UPNEDA" and the Contractor, in the connection with the agreement except as to matters, the decisions for which have been specifically provided in the Agreement either party may forthwith give to the other notice in writing of existence of such question, dispute or difference and the same shall be referred to the sole arbitration of the Principal Secretary/Secretary/Department, government of Uttar Pradesh or a person nominated by him not below the rank of Special Secretary. This reference shall be governed by the Indian Arbitration and Conciliation Act 1996, and the rules made there under. The award in such arbitration shall be final and binding on both the parties. Work under the agreement shall be continuing during the arbitration proceedings unless the "UPNEDA" or the arbitrator directs otherwise

CUT-DOWN OF WORK

9 "UPNEDA" may at any time by notice in writing to the Contractor either stops the work all together or reduce or cut it down. If the work is stopped all together, the Contractor will only be paid

for work done and expenses distinctly incurred by him as on preparation or the execution of the work up to the date on which such notice is received by him. Such expenses shall be assessed by “UPNEDA”, whose decision shall be final and binding on the contractor/ bidder. If the work is cut down the Contractor will not be paid any compensation whatever for the loss or profit which he might have made if he had been allowed to complete all the work included in the Agreement.

10 INSPECTION AND TESTS

10.1 The following inspection procedures and tests are required by the “UPNEDA” in the presence of “UPNEDA”’s representative, if so desired by “UPNEDA”.

10.2 The “UPNEDA” or its representative shall have the right to inspect and / or to test the goods to confirm their conformity to the contract. The special conditions of contract and/ or the Technical specifications shall specify what inspections and test the “UPNEDA” required

10.3 INSPECTION AT WORKS.

10.3.1 The “UPNEDA”, and its duly authorized representative shall have at all reasonable times access to the Contractor premises or works and shall have the power at all reasonable time to inspect and examine the materials and workmanship of the works during its manufacture.

10.3.2 The Contractor shall give the “UPNEDA”, 15 day's written notice of any material being ready for testing. It shall be mandatory that such notice should reach “UPNEDA” within 30 days of placement of work order. Such tests shall be on the contractor/ bidder's accounts/ expenses except for the expenses of the inspector. “UPNEDA” reserves the full rights, to waive off inspection of material

10.3.3 The Contractor is required to get the entire lot of the ordered material inspected at one time, before the supply of the materials. In case the Contractor fails to get the entire lot inspected at one time, the total expenses of the further inspection will be borne by the Contractor.

10.3.4 UPNEDA will bear the inspector cost at only one manufacturing plant. If a component is produced in more than one location, then the cost of positioning the inspection in the second and subsequent plants would be borne by the Successful Bidder at their cost.

10.3.5 The inspection by “UPNEDA” and issue of dispatch instruction there on shall in no way limit the liabilities and responsibilities of the Contractor in respect of the agreed quality assurance programme forming a part of the contract.

11. WARRANTY

11.1 The Contractor shall warrant as per standards for quality that anything to be furnished shall be new, free from all defects, faults in material and workmanship and manufacture shall be of the highest grade and consistent with established and generally accepted standards for material of the type ordered, shall be in full conformity with the specifications, drawing or samples, if any and shall if operable, operate properly. Nothing in clause 10 above shall in any way release the Contractor from any guarantee or other obligations under the Agreement..

11.2 Performance of Equipment: In addition to the warranty as already provided, the Contractor shall guarantee satisfactory performance of the equipment and shall be responsible for the period or up to the date specified in clause 11.3 hereof after the equipment has been accepted by the “UPNEDA” to the extent for any defects that may develop such defects shall be removed at Contractors cost when called upon to do so by the “UPNEDA”

11.3 The Warranty period shall be 25 Years for the PV modules and 5 years for complete system including R O water, Fan, Pump etc from the date of commissioning and handing over of the system. The Contractor shall rectify defects developed in the system within Warranty period promptly. In case the defects are not rectified within a 3 days of the receipt of the complaint by the Contractor “UPNEDA” shall have full liberty to restore the system in working condition. The expenditure so incurred by “UPNEDA” shall be deducted from the Contractor pending claims, security deposit or in other law full manner.

11.4 Since the maintenance of the system may also be taken up by the Contractor after expiry of 05 years of warranty period if the end user/”UPNEDA” so desires, the Contractor shall take up annual maintenance of the installed system.

11.5 The Contractor shall maintain the system under annual maintenance contract with the end user.

12. Notice statement and other communication send by “UPNEDA” through registered post or telegram or fax or Email to the Contractor at his specified addresses shall be deemed to have been delivered to the Contractor.

13. Any work which is not covered under the Agreement but is essentially required for the completion of job (To the satisfaction of UPNEDA) shall be carried out by the contractor as extra item and which payment shall be made separately at the rates decided by UPNEDA.

14. The work shall be carried out by the Contractor as per design and drawings approved by “UPNEDA” wherever necessary, the Contractor shall submit relevant designs and drawings for approval of “UPNEDA”, well in advance. Work carried out without “UPNEDA”'s approval shall not be accepted and the “UPNEDA” shall have right to get it removed and to recover the cost so incurred from the Contractor.

15. The Contractor shall provide one copy system pass book containing instruction manual/ routine maintenance manual and maintenance record of the systems with each unit supplied or installed, this shall in Hindi language. The pass book shall be kept with each school in custody of Head Master. The detailed maintenance activity including quarterly visit shall be recorded in it. The following minimum details must be provided with manual:

- (a) About the complete photovoltaic system including PV modules, Pump and RO Water
- (b) Do's and Don'ts
- (c) Clear instructions on regular maintenance and troubleshooting of the system
- (d) Name & address of the contact person in case of non-functioning of the system.

16. The contractor/ bidder shall not display the photographs of the work and not take advantage through publicity of the work without written permission of “UPNEDA”.

17. PATENT RIGHT AND ROYALTIES.

The Contractor shall indemnify the “UPNEDA” against all third party claims of Infringement of patent, royalty's trademark or industrial design rights arising from use to the goods or any part thereof.

18. PACKING FORWARDING

18.1 Contractor wherever applicable, shall after proper painting, pack and crate all the equipment in such manner as to protect them from deterioration and damage during rail and road transportation to the site and storage at the site till time of installation. Contractor shall be held responsible for all damage due to improper packing.

18.2 The Contractor shall inform the “UPNEDA” of the date of each shipment from his works, and the expected date of arrival at the site for the information of the “UPNEDA” project offices at least 7 days in advance.

19. DEMURRAGE WHARF AGE, ETC

All demurrage, wharf age and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the Contractor.

20. INSURANCE

The goods supplied under the contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation and storage during transportation shall be included in the bid price.

21. TRANSPORTATION

The Contractor is required under the contract to deliver the goods to the site.

22. TERMINATION FOR INSOLVENCY

22.1 “UPNEDA” may at any time terminate the Agreement by giving written notice to the Contractor without compensation to the contractor/ bidder, if it becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the “UPNEDA”.

22.2 The Agreement shall be terminated by UPNEDA by giving days notice to the Contractor on the following grounds:

- (a) Contractor has committed breach of any covenants of the Agreement.
- (b) Rendering of unsatisfactory services by the Contractor.

22.3 UPNEDA shall be liable to pay any compensation to the Contractor for termination of Agreement on the grounds mentioned in this clause 22.

23. ABANDONMENT OF CONTRACT

The “UPNEDA”, may by written notice sent to the Contractor/ Bidder, abandon the contract, in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for the purchaser's convenience in the interest of “UPNEDA”.

24. APPLICABLE LAW

The contractor/ bidder shall be interpreted in accordance with the laws of the purchaser's country i.e. India. The station of “UPNEDA” Headquarter shall have exclusive jurisdiction in all matters arising under this contract.

25. NOTICE

25.1 Any notice given by one party to the other pursuant to the contract shall be sent in writing or by telegram or telex/ cable or Email and confirmed in writing to the address specified for that

purpose in the special condition of contract.

25.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

26. TAXES DUTIES AND INSURANCE:

The price quoted should include all taxes, duties and Insurance expenditure etc. A supplier/contractor/ bidder shall be entirely responsible for all taxes, duties, license fees, etc. All taxes payable as per Government income tax & GST norms will be payable by the contractor/ bidder. If any new tax/duty is levied during the contract period the same will be borne by the contractor exclusively. TDS will be deducted from the payment of the contractor/ bidder as per the prevalent laws and rules of Government of India and Government of the Uttar Pradesh in this regard. The UPNEDA will not issue any road permits etc, the contractor has to arrange with own.

27. OTHERS:

27.1 I-V curve of the each module or technical details such as Voc, Isc, , FF, cell efficiency and Pmax etc shall be supplied along-with each consignment and copy should be sent along with each system for records.

27.2. The Contractor/ Bidder in consultation with concerned Project Officer of "UPNEDA" will conduct training programme for users, focusing on main features, operation and maintenance of the systems.

27.3 The Contractor/ bidder shall continue to provide spare parts after the expiry of warranty period at the users cost. If the contractor/ bidder fail to continue to supply spare parts and services to users "UPNEDA" shall take appropriate action against the Contractor/ bidder

27.4 After successful supply/commissioning of the system and training, the system will be handed over to the concerned beneficiaries as per direction of UPNEDA

27.5 It shall be the sole responsibility of the Contractor/ Bidder to get verified the quality and quantity of the supplied material at the site of delivery.

27.6 The contractor shall install a display board of minimum size 4 feet by 3 feet. The content on display board shall be got approved by UPNEDA.

28. PAYMENTS:

The payments shall be made as per the following terms and conditions:

i) The payments shall be made as per the following terms and conditions:

i) 50% of the ordered value after the supply of the complete system at site and duly certified by the concerned district officer of UPNEDA as per the technical specification and terms and conditions specified in the contract.

ii.) 35% of the ordered value after installation and commissioning of the system, establishing of service center, along with the summary of Joint Commissioning & handing over certificate, indicating bill of material and successful commissioning duly countersigned by the designated officer and end user.

iii) The balance 15% payment shall be released against AMC charges on annual basis kept as security deposit and to be released @ 1.5% at the end of every six months, for five years on satisfactory performance and timely submission of quarterly performance report.

29. In case of any ambiguity in interpretation of any of the provisions of the tender, the decision of "UPNEDA" shall be final.

(Signature of Bidder)
with seal

SCOPE OF WORK AND TECHNICAL SPECIFICATIONS

SCOPE OF WORK

The scope of work includes design, supply, installation, commissioning of 1.1 KW Solar power plants along with five Fan, One DC submersible Water Pump, RO water purifier and overhead tank etc. and comprehensive maintenance during 05 years of warranty period in various District of Uttar Pradesh as per the following specifications.

The scope of work also include mandatory opening of Service Center in their name in concerned district through which servicing and maintenance be provided as stipulated quarterly or within 72 hours' time as per Part 5 of this document.

GENERAL TECHNICAL SPECIFICATION:

A Solar PV RO water system consist of A DC Submersible Pump, RO water purifier, Fan, Water Tank along with 1.1 KW PV modules, necessary control electronics-inter connecting wires / cables, module mounting structures, water pipe line, civil work etc..

MINIMUM TECHNICAL REQUIREMENTS / STANDARDS:

1. SPV MODULES:

- i. Capacity: The total capacity of Array should not be less than 1100 Watt at STC as per following configuration :
 - a) 325 watt 72 cell -2 nos for pump
 - b) 150 Watt 72 cell -1 no for R O water
 - c) 300 Watt 72 cell-1 no or 150 watt -72 cell 2 nos for Fan
- ii. Only indigenous modules of reputed Indian brand IEC certified shall only be used in the project. Crystalline high power/efficiency cell should be used in the Solar Photovoltaic module. The crystalline cell efficiency should not be less than 16% and module efficiency 15%. The fill factor of module should be more than 0.70.
- iii. PV module must be warranted for output wattage, which should not be less than 90% at the end of 12 years and 80% at the end of 25 years.
- iv. The terminal box on the module shall be designed for long life out door operation in harsh environment and should have a provision for opening for replacing the cable, if required.
- v. The offered PV modules must qualify as per relevant latest IEC 61215 / IS 14286 and IEC 61730 standards. Additionally the performance of PV modules at STC conditions must be tested and approved by one of the IECQ / NABL Accredited Testing Laboratories including Solar Energy Centre.

The performance test certificate of offered SPV module must be issued on or after 1st April 2016.

The solar module must be from ALMM list approved by MNRE from effective date of implementation as per MNRE order no 283/54/2018-Grid solar dated 3rd Jan 2019 or its latest amendments

vi. Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided and if required, blocking diode(s) may also be provided.

vii. IDENTIFICATION AND TRACEABILITY

There should be a Name Plate fixed inside the module which will give:

- i. Name of the Manufacturer or Distinctive Logo.
- ii. Model Number; iii. Serial Number; iv. Year of manufacture
- v. UPNEDA logo (available on-line); vi. Made in India

2. PUMP:

1. The submersible pump of capacity min 0.75 hp should be installed in existing hand pump bore available at site to make dual water pumping using special arrangement.

2. The pump should be DC Submersible Pump of Light weight S.S., permanent magnet, DC brushless type with necessary controller etc.

3. Built-in features –

- a. Outer dia should not be more than 96 mm,
 - b. Out let of the pump should be 32mm
 - c. Dry run protection
 - d. Over and under voltage protection
 - a. Overload protection
 - b. Temperature Protection
10. Operating Pumping head 15-120 mtr.

The offered Pump should be tested with MNRE authorized Lab and test report should be issued on or after 1st April 2016.

2. Cable:-

- 1. Min 3 core x 2.5 sq.mm cable as per IS 694- .
- 2. PVC Pipe ½ inch for covering cable for concealed connection.
- 3. Cable clips as per site requirement

3. RO WATER PURIFIER:

The Water purifier should capable to purify the water with minimum 50 LPH. The storage capacity of RO water tank should be 100 litre. The storage tank for purified water should be stainless steel. The power consumption of RO water should not be 80 Watt. The RO system shall work directly connected to module having a wide working range of voltage with nominal operating voltage 24 Volt. There should not be any external controller/electronics used and this should be run without any battery. The purifier should be tested for its water pliability as per BIS 10500 -1991 or latest edition and should be tested by the NABAL accredited lab. The Outer casing of the system should be made of stainless steel grade SS-03. The RO water storage tank and purifier unit should be integrated for its automatic operation. The purifier should be tested with NBAL accredited lab. To avoid the chocking of the R O water cartage with sand/mud a pre filter unit should be installed before the R O water inlet. Due to varying types of slush and to avoid scaling, Auto flushing system

should be provided in the RO.

The auto flushing shall be achieved by providing automatic interval cleaning of pre filter. The working of the system shall be as per following:

1. When the RO system starts, auto flush shall switch to flushing mode for a brief time to take away old water from the system.
2. When the RO system stops, auto flush shall switch to flushing mode for a brief time to take away the water from the system.
3. The timing of auto flash shall be settable as per the requirement of particular site
4. All the component shall be suitable to withstand the harsh environment of Rural system and shall be automatic.

The RO water test report should be NABAL accredited lab and test report should be issued on or after 1st April 2016. The test report of only water without RO water Machine shall not be accepted, the RO water machine should also be tested for its capacity with water quality.

4. Fan:

The Fan should be operated on DC; the capacity of fan should be 35 watt to maximum 40 watt having 48 inch dia. The operating voltage of fan should be between 22 -32 Volt with nominal operating voltage 24 Volt. The air delivery of fan should be more than 190 m³/min. The motor of DC fan should be brushless permanent magnet. The material of permanent magnet should be made of hard ferrite. The fan should be tested with NABL accredited lab. The fan should be installed in rooms of primary School and operated during day time. The wiring shall be done with PVC conduit mounted on wall. There shall be fixed type wall mounted on off switch along with regulator for each fan suitable located in respective place. To ensure the smooth running of the Fan and avoid it's jerking during fluctuation of solar irradiation in cloudy days a 24 volt 6 Ah Lithium Ferro phosphate battery should be installed with electronic controller. The maximum duration of load on battery should not be more than 30 minutes during fluctuation and the fan should be off if irradiation is low for more than 30 minutes.

The test report of Fan and Lifepo4 battery from NABAL accredited lab issued **on or after 1st April 2016 should be submitted. In case of lifepo4 battery the test report individual cell of capacity not less than 3 Ah/6 Ah to be used in 24 volt pack should also be considered.**

- 5. STORAGE WATER TANK:** The Capacity of Storage tank should be 2*1000 liter, made high grade HDPE of three ply. The tank should be suitable for use of potable drinking water as per BIS/other international standard. Both tanks should be installed on the roof of the school building. Proper flat platform of 150 mm high with brick and cement should be made on the roof for its installation. Both tanks should be installed in series. One tank will be connected to RO water and kitchen. The other tank will be connected to toilet. The water tank should have float switch or other

arrangement to switch off the pump when tank is filled.

6. MECHANICAL HARDWARE

7. A MS frame structure (hot dip galvanized with min 40*40*5 mm angle) to be fixed on the roof for mounting of Solar PV Panel. The frame structure should be fixed at 30 degree from horizontal facing true south. The support structure used in should be hot dip galvanized iron with minimum 80 micron thickness. The structure should have minimum 4 legs and it should be joined at least from both sides. The legs should have base plate of 150*150*6 mm welded on it. The front side minimum ground clearance should be 30 cm.

Piping :

The piping should be GI/CPVC pipe as per BIS specifications of suitable diameter as per requirement of systems and site. From RO water tank five taps should be provided for taking the water output. The taps should be push button type made of steel for heavy duty operation. Below the taps suitable sink should also be provided for proper drainage of waste water.

From overhead tank one water line should be provided in Kitchen directly from R O water overhead 1000 liter Tank. The other tank of 1000 liter should be connected to each toilet with one tap.

8. Special Requirement:

1. The 3 running component of the systems (i) Solar Pump (ii) Solar RO and (iii) DC Fan should have independent working directly with SPV module.
2. **To avoid the theft of the solar panel, module should be fixed on structure with anti-theft locking nut bolt made of cold forage stainless Steel or welded properly.**
3. **An Alarm arrangement should also be made to avoid the theft of panel during night i.e when wire connected with structure is disconnected the alarm should be activated. The other option such as mobile alarm also be considred.**

9. OTHER FEATURES

A toll free number (i.e. 1800 180 0005) of IVRS of UPNEDA and 14 digit UID number of minimum computer font size 72 or 13 mm (issued/provided by UPNEDA) is to be embossed/ punch on RO water by contractor/ bidder, which in case of non-working/ operational problems etc of system will be dialed by the beneficiary etc to lodge a complaint in respect of system problems. The IVRS will divert the complaint to Contractor/ bidder through E mail, SMS etc. The contractor/ bidder will have to rectify the same to make/ restore the system to working position within 72 hours in the warrantee period of 5 years, failing which the system may be get rectified on contractor/ bidder cost and the cost will be recovered by contractor/ bidders pending claims what so ever and appropriate action as per noncompliance etc of agreement will be considered/taken.

10. INSTALLATION OF SYSTEM:

The entire module should be grouted in one structure. The system should be properly installed on roof of School. The SPV module mounting structure along with suitable mounting arrangement should be properly grouted depending upon the requirement of the site. The grouting should be such that it should withstand the maximum wind speed /storm of 180Km/hr. The front end of the solar array must be 30 CM above the ground preferably all the legs of the frame should be grouted with M15 mixture of 1:2:4. Before grouting, the legs should be properly anchored with base plate of 150*150*6 mm and 4 nos fastener of AF14. However, considering the condition of the roof the mounting structure should be grouted with suitably designed structure having all legs joined together with suitable MS angle and grouted sufficiently on the roof to withstand the storm conditions.

Cables of appropriate size should be used to keep electrical losses to a bare minimum. All wiring should be in a proper conduit or capping case. Wire should not be hanging loose. Any minor items which are not specifically included in the scope of work but require for proper installation and efficient operation of the systems is to be provided by the manufacturer as per standards. All the cables shall be supplied conforming to IEC 60227– IS 694 / IS 1554 – IS / IEC 60502 shall be of 650 V/ 1.1 kV grade as per requirement. Only PVC copper cables shall be used. The size of the cables between array to pump, RO water and fan etc shall be so selected to keep the voltage drop and losses to the minimum. Permissible Wire Drop shall be $\leq 1\%$. The DC cable from the SPV module shall be run through PVC conduit pipes, which in turn shall be firmly fixed to the wall with clamps.

■ Rigid PVC Conduit of nominal dia as per IS standard (IS: 9537)-medium class.

■ Clamps shall be provided at 1 meter spacing to secure the conduits

■ Ensure colour Coding of all wiring as follows:

DC (Positive) =Red

DC (Negative)=Black

Earth =green

11. WARRANTY

All the component of the system including mechanical structures, electrical works including etc. and overall workmanship of the systems must be warranted against any manufacturing/ design/ installation defects for a minimum period of 5 years.

Traceability of the product to be supplied

In order to prevent the misuse of the product such as unauthorized sale or diversion to the open market UPNEDA should be Engraving / Screen printing/metallic stickers at suitable place on the Main components viz., SPV Panel, RO water, Fan and pump.

PART -5

WARRANTY AND MAINTENANCE

- The PV modules will be warranted for a minimum period of 25 years from the date of supply. (Output wattage should not be less than 90% at the end of 12 years and 80% at the end of 25 years).
- The mechanical structures, electrical components etc. and overall workmanship of the complete systems must be warranted for a minimum of 5 years from the date of commissioning and handing over of the system.
- The Comprehensive Maintenance (within warranty period) shall be executed by the firm themselves service center of the firm in the concerned district.
- It is mandatory for the contractor/ bidder to open a service center in the concerned district before the supply/installation of the system.
- The cartridge of RO water must be replaced on yearly basis
- The contractor/ bidder shall be responsible to replace free of cost (including transportation and insurance expenses) to the purchaser whole or any part of supply which under normal and proper use become dysfunctional within one week of issue of any such complaint by the purchaser.
- The service personnel of the Successful Bidder will make routine quarterly maintenance visits. The maintenance shall include thorough testing & replacement of any damaged parts Apart from this any complaint registered/ service calls received / faults notified in the report generated by the IVRS should be attended to and the system should be repaired/ restored/ replaced within 4 days.
- A separate Service & Maintenance manual shall be maintained with each system as per the format provided by UPNEDA. The deputed personnel shall be in a position to check and test all the components regularly, so that preventive actions, if any, could be taken well in advance to save any equipment from damage. Any abnormal behavior of any component shall be brought to the notice of UPNEDA for appropriate action.
- Normal and preventive maintenance of the systems such as cleaning of module surface, tightening of all electrical connections, cleaning of RO water, also the duties of the deputed personnel during quarterly maintenance visits.
- During operation and maintenance period of the systems, if there is any loss or damage of any component due to miss management/miss handling or due to any other reasons pertaining to the deputed personnel, what-so-ever, the supplier shall be responsible for immediate replacement/rectification. The damaged component may be repaired or replaced by new component .

**PART-6
TECHNICAL BID**

e-tender NO. .- UPNEDA/SPV/SPROW/2019-20/02

Technical Bid (Part-I)					
Description		To be furnished by the Tenderer			
A.	Solar PV Module				
1.	Type of Module				
2.	Make				
3.	Max power at STC Pmax (W)				
4.	Max power voltage Vmp(V)				
5.	Max power current Imp(A)				
6.	No of cells per module				
7.	Fill factor				
B.	PUMP				
1.	Make				
2.	Type				
3.	Rated capacity				
4.	Maximum head				
5.	Operating voltage range				
6.	Rated Current				
7.	Discharge at maximum head				
8.	Others				
C.	RO Water Purifier				
1.	Make				
2.	Flow rate				
3.	Water tank capacity				

4.	Water purification standard	
5.	Power consumption	
6.	Cartages replacement time	
D. DC Fan		
1.	Make	
2.	Power consumption	
3.	Type of motor	
4.	Air delivery	
5.	Input Voltage range	
E. Module Mounting frame		
1.	Material used	
2.	Whether Protection against corrosion provided	
3.	Angle of inclination to horizontal	
F. Storage Tank		
1.	Material	
2.	Dimension	
3.	Make	
G. Connecting pipe line		
1.	Material and size	
2.	Material and class of water pipeline	
H Alarm Details		
1	Operating methodology	
2	Power requirement	
J Battery details		
	Make	
	Capacity	

(Signature of Bidder)
with seal

PART-7
FINANCIAL BID
e-tender NO. .- UPNEDA/SPV/SPROW/2019-20/02
Financial Bid (Part-II)

Name of the Firm: -----

Supply, installation & commissioning and 5 years comprehensive maintenance of Complete Solar PV RO water system in various Primary School of Uttar Pradesh.

Price in Indian Rs.

Item/work	Rate per system
Supply, installation and commissioning and 5 years comprehensive maintenance of Complete Solar PV power plant of 1.1 KW including Fan, water pump, RO water purifier, Storage water tank, electronics, necessary control, wire, related civil, electrical and mechanical work etc in various Primary School of Uttar Pradesh.	

NOTES:

1. Certified that rates quoted above are as per the requirement, specification terms & condition mentioned in the e-tender document.
2. ~~The rates are inclusive of all other taxes & duties, storage, transportation up to site, insurance etc., and any other job required to properly execute the work.~~

(Signature of Bidder)
With seal

To be uploaded in Part-II. Other documents / conditions, terms if enclosed will liable to be rejection of bid.

Annexure - I

Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA)

JOINT COMMISSIONING AND HANDING OVER CERTIFICATE /WARRANTEE CARD:

(To be submitted in 3 copies)

It is hereby certified that following system has been supplied, installed, commissioned and handed over to the beneficiary as per following details:-

Sr. No.	Items	Details
1	Name of system	
2	Agreement Number and date	
3	Work Order Number Date	
4	UID number (14 digit)	
5	Name of school with Head Master mobile number.	
6	District	
7	Block	
8	Village/Gram Panchayat	
10	Date of installation	
11	Warrantee expire on	
12	Name & Address of the Manufacturer/ Supplier of the system with mobile no for maintenance contact	
13	SPV Modules Installed Sr. No Make Model	
14	DC Pump Sr. No Make Model	
15	RO Water Sr. No Make Model	
16	Fan Sr. No Make Model	
	Training for operation & maintenance of the systems	Provided/Not Provided
	Technical literature, operation & maintenance manual in English & Hindi	Provided/Not Provided

(Signature)

Authorized Signatory of

firm

(with seal)

(Signature)

Sr./Project Officer/Incharge -Project

UPNEDA

(With seal)

System Photo:

(In case of complaint dial toll free number 1800 180 0005.)

The Above System is being taken over by us in new and good condition and we will ensure the safety & security and also the weekly cleaning of solar panel of the system.

- 1- gLrk{kj
- 2- la@ iklr djus okys dk uke
- 3- ykHkkFkz l aFkk@xke ipk; r@ vU; l aFkk dk uke
- 4- egj

Model Bank Guarantee Format for Furnishing EMD

Whereas(hereinafter called the “tenderer”) has submitted their offer dated..... for the supply, installation, commissioning with 5 years of comprehensive warranty maintenance of hereinafter called the “tender”) against the purchaser’s tender enquiry No.KNOW ALL MEN by these presents that WE ofhaving our registered office at are bound unto (hereinafter called the “Purchaser) in the sum of Rs..... for which payment will 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 of20..... THE CONDITIONS OF THIS OBLIGATION ARE:

If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.

If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity

- (1) Fails to furnish the Performance Security for the due performance of the contract.
- (2) Fails or refuses to accept/execute the contract.

WE undertake to pay 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 both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 (forty five) days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

.....

(Signature of the authorised officer of the Bank)

.....

Name and designation of the officer

.....

Seal, name and address of the Bank / Branch