From

The Director General
New& Renewable Energy Department Haryana & HAREDA
Akshay Urja Bhawan, Sector-17,
Panchkula

To

M/s Ecozen Solution Pvt. Ltd.
Survey No. 134/1-2-3, Jeevan Nagar,
Tathawade, Mumbai, Pune Highway,
Pune (MH) 411 033

Memo no. DNRE&H/2020/ 7106 Dated: 24/09/2020

Subject:- **Notice to Proceed (NTP)/Work order for supply, installation and commissioning of solar water pumping systems under Component-B of the PM-KUSUM Scheme**

Reference:

I. EESL NIT and Bid Document No.: EESL/06/2019-20/KUSUM/SWPS /Phase-1/Off Grid//192007012 dated 21.08.2019; E-tender ID: 1554 and its amendments
II. MNRE letter no. 32/54/2018-SPV Division dated 18.12.2019
III. Memo No. HAREDA/2020/635-662 dated 28.01.2020
IV. SNA's LOA No.820-825 dated 03.02.2020 and No. 1285-1313 dated 19.02.2020.

We are pleased to place the work order of the stores as per the details given below for design, manufacture, supply, installation, testing & commissioning of Solar Water Pumping Systems (SWPS) with five years warranty of the complete system(s) from the date of commissioning and PV modules used must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years at various locations across the State of Haryana under PM-KUSUM Scheme on rates, terms and conditions mentioned hereunder:-

1. **PRICE** (Excluding GST) for Solar Photovoltaic Water Pumping System with normal controller are:

Pump Capacity	Type	Rate/system (Rs.)	Quantity (Nos.)	Total Value (Rs.)
3 HP AC	Submersible	₹ 1,52,028	31	47,12,868
		TOTAL	**31**	**47,12,868**

Note: GST will be extra as applicable
(Total work order value is Forty Seven Lakh Twelve Thousand Eight Hundred and Sixty Eight only, excluding GST)

2. **SCOPE OF WORK:**

Designing, Supply, Installation, Testing & Commissioning of Solar Water Pumping System (SWPS) including complete system warranty and its repair and maintenance for 5 Years under PM-KUSUM Scheme as per MNRE technical specifications 2019 and applicable BIS standards in the State of Haryana.

The quantity mentioned for number of solar pumps above is tentative and subject to increase or decrease depending on the actual requirement, resources available and quality of work performed by the contractor. The scope of work covers:

A. Supply and Manufacture:

i. The contractor shall be responsible for design, supply, installation and commissioning of SWPS along with 5 years of repair and maintenance. To ensure timely maintenance of SWPS, apart from training a local person and making available necessary spare parts & tools, the contractor shall have one authorized service center in each operational district and a helpline(s) in English/Hindi where such SWPS are installed.

ii. The contractor should submit Data Sheet, General Technical Particular (GTP), Design & General Arrangement (GA) drawing of the system along with Bill of Quantity (BOQ) for Department's approval before supply/Pre-Dispatch Inspection (PDI). Also, contractor has to take drawing approval for the complete system from DNRE&H within 15 days from the award of this Work Order.

iii. Each pump should be marked with Toll Free No. of the contractor in English/Hindi and specific pump numbers as per the instructions of the Department at the time of Installation at site. During the time of PDI of each component, test report of equipment's, warranty certificates and calibration certificates should be provided by the contractor. Also, contractor should submit module structure wind withstand capacity certificate as per NIT for wind speed of 150 Km/hour.

B. Installation & Commissioning

i. Installation and commissioning of solar photovoltaic water pumping system shall be done by the contractor strictly as per the specifications and term and conditions of the NIT.

ii. Contractor has to submit weekly consent of beneficiaries in their favors to the District Offices for which the Department will give Notice to Proceed (NTP) and for this, contractor shall complete the installation and Commissioning of SWPS **within 90 days** of issuance of NTP/work order.

iii. Contractor should conduct site survey and provide Progress Report as per the instructions of the Department.

iv. Intimation to be given to SNA's before one week of Pre-Dispatch inspection call and should submit complete warranty and test certificates of each lot at the time of PDI.

v. Contractor should submit the installation and commissioning reports, monthly and quarterly progress reports online to the Department.

vi. Contractor shall comply with all applicable regulatory and statutory norms. Contractor has to obtain approval/NOC (where ever required) from appropriate Govt. authority for implementing the project in each selected village.

vii. Each SWPS is to be provided with a colored metallic sticker duly riveted displaying the following details:

The firm will print the words "PROMOTED BY HAREDA and FUNDED by NABARD (along with their logos, available online) & YEAR 2020-21".

viii. Contractor should submit the JCRs (as per prescribed format) and photographs of each SWPS installed which must show complete installation setup with beneficiary, Pump number etc.

ix. Contractor has to ensure working of minimum 95% of total installed SWPS at any point of time.

C. Operation & Maintenance (O&M), Training, Awareness and sensitization

i. The Contractor shall ensure for repair and maintenance of SWPS for 5 yrs in co-ordination with DNRE&H. Contractor should keep necessary spare parts (min 5% of allotted quantity of each component of the complete system at the service center at each district and should ensure proper maintenance of SWPS for 5 years from the date of installation of each SWPS. Contractor should also ensure to provide local training to local persons regarding proper maintenance of the SWPS. Contractor should submit bi-weekly maintenance report and quarterly inspection report of the installation as per prescribed format provided by the Department to the district offices

ii. Any complaint registered/ service calls received should be attended at the earliest and the system should be repaired, restored, replaced within 3 days from the date of complaint received/informed to the contractor.

iii. The installation data should be punched in the Web Platform being developed by the Department as per the terms and conditions provided by MNRE.

iv. The Ministry officials or designated agency may inspect the ongoing installation or installed plants. In case the Installed systems are not as per standards, non-functional

on account of poor quality of installation, or non compliance of maintenance, the Ministry and the Department reserves the right to blacklist the vendor.

v. Bidder has to submit an Operation and Maintenance Manual, in English and Hindi language with each solar photovoltaic water pumping system to the beneficiary. The following minimum details must be provided in the Manual:

- Basic principles of Photovoltaics
- A small write-up (with a block diagram) on solar photovoltaic water pumping system - Its components, PV module, electronics and expected performance.
- A simple single line diagram (SLD) depicting the electrical circuits and control mechanism
- Type, Voltage & capacity of the motor etc. used In the system.
- Significance of indicators.
- Clear instructions on regular maintenance and trouble-shooting of the solar photovoltaic water pumping system
- Preventive maintenance schedule
- Detail information about warranty coverage, DO's and DONT's.
- Name and address of the contact person for repair and maintenance, in case of non- functionality of the solar photovoltaic water pumping system.
- Description of frequent faults of PV module and pump and its remedy.
- Minimum 10 hard copies (to be printed in booklet form) kept at each service center. Also, to be provided to SNA as and when required.

vi. If complaint is not rectified within 3 days from the date of complaint received/informed to the contractor, in that case after 3 days INR 100 per pump/day penalty will be imposed, for first 3 days and thereafter Rs. 500/ per pump/day shall be imposed till the SWPS put back to satisfactory working condition to be duly certified by the user/district office. This amount shall be recovered from running bills or CPG of the contractor.

vii. Contractor shall submit a detailed report and short 5-minute high definition video per district including local training, awareness and sensitization campaigns, Methodology for sustainable maintenance for further five years to the beneficiaries with relevant photographs.

3 Eligible Beneficiary (farmer) for Solar Photovoltaic Water Pumping (SWPS)

List of prospective eligible beneficiary is available on official website i.e. hareda.gov.in. Contractors shall also get the list from District Offices. Department will issue Notice to proceed (Work Order) for supply installation& commissioning of SWPS after receiving of site survey report/and consent beneficiary share to the Department from time to time.

4 Action Plan:

Action plan should be submitted to the Department including complete details of team, resources, service centers in each district within 30 days of issue of this work order.

5. Contract Performance Guarantee (CPG)

The contractor have to submit another 10% CPG of the order value of NTP (Work order) for above 500 numbers or allocated value (as the case may be) in the form of a bank guarantee in favour of Director General, NRE&H Panchkula with a validity of 5 year within 30 days from the date for issuance of work accordance with the conditions of the EESL, tender.

6. Test reports

Contractor must submit valid pump test certificates within 30 days from the date of issuance of Notice To Proceed/work order, for each pump category in which bidder gets empanelled by MNRE (As per PM PM-KUSUM guideline component, 'B' and MNRE specification and testing

procedures issued in 2019) from any NABL accredited Lab. In case Bidder fails to submit test certificates as per MNRE technical specifications-2019 within 30 days of placing of first NTP (work order), his empanelment will stand cancelled, without any prior intimation.

7. Universal Solar Pump Controller

The contractor shall offer the option of Universal Solar Pump Controller to the beneficiaries. The contractor shall give consent in consultation with the beneficiary along with its additional cost (without subsidy), which is to be deposited to the Department

8. Completion Schedule, liquidated damage/delay penalty

Contractor has to submit weekly consent of beneficiaries in their favors to NRE&H for which the Department will give Notice To Proceed (NTP) and for this, contractor shall complete the installation and Commissioning of SWPS within 90 days of Issuance of NTP.

In case of any delay in the execution of the order beyond the stipulated time schedule including any extension permitted in writing, the Department reserves the right to recover from the contractor, a sum equivalent to 0.5% of the value of the delayed equipment Installation/unexecuted portion of work for each week of delay and part thereof subject to a maximum of 5% of the total value of the contract.

Alternatively, the Department reserves the right to purchase and distribute equipment/ material from elsewhere at the sole risk at the cost of contractor and recover all such extra cost incurred by the Department in procuring the material from resources available including EMD/Bid Security/encashment of Bank Guarantee or any other sources etc. Further, if any extra cost is incurred by the Department due to delay in work completion by the party beyond the completion time as per work order, the same shall also be recovered from invoice/EMD/BGs etc.

Alternatively, NRE&H may cancel the work order completely or partly without prejudice to his right under the alternatives mentioned above.

9. Inspection and Dispatch Instructions

All Items/equipment shall be subject to Pre-Dispatch Inspection (PDI) by NRE&H or its authorized representatives at the manufacturing site of major components (module, pumps and controller) before their dispatch. The manufacturing site must have basic testing facility for testing of system as per technical specification of the NIT. The manufacturer will submit test report with regard conformity to technical specifications for the items to be dispatched to work site of NRE&H. However, equipments will be dispatched from the manufacturing site only after the receipt of "Dispatch Clearance" from NRE&H after acceptance of test report. No consignment shall be dispatched without the receipt of dispatch clearance from DNRE&H. ***No PDI shall be done at any site other than the concerned manufacturing site. Contractor has to arrange necessary equipments for testing the materials to be supplied during the pre-dispatch inspection by NRE&H at their manufacturer's unit conforming to NABL facility. Failure to fulfill the PDI conditions shall lead to cancelation of work order and forfeiture of security deposit.***

The contractor will have to ensure pre dispatch inspection within 30 days period from issue of NTP/work order by the DNRE&H and within next 15 days DNRE&H will Issue Dispatch instruction. Accordingly the work of supply & installation will be completed by the vendor within 90 days period from the date of issue of NTP/work order.

10. Insurance

Comprehensive insurance of Solar Photo Voltaic Water Pumping System shall be provided for natural calamities, theft & burglary etc. during 5 years warranty period by the bidders as per NIT.

11. Terms of Payment

Stage I: - 90% of the value of month-wise nos. of SWPS installed at site and 100% applicable taxes there upon based on:

i. Submission of detailed work plan (Project Execution plan) with timeline for the lot supplied duly approved by DNRE&H;

ii. Submission of evidence in hard copy regarding completion of installation of SWPS in good condition at site, duly verified and acknowledged by DNRE&H and beneficiary.
iii. All the relevant Warranty and quality (performance test reports) of the lot to be submitted.
iv. Signing of contract agreement with the Department.
v. Submission of Contract Performance Guarantee (CPG) as per relevant CPG clause to DNRE&H.
vi. Submission of original supply Invoices/Bills duly verified/certified by DNRE&H.
vii. Submission of report supported with labelled photograph on completion of village community training, awareness/ sensitization, capacity building measures undertaken and development of entrepreneurship etc. in each village with relevant photographs.
viii. Submission of installation and commissioning report as per prescribed format of DNRE&H with RMS data and Geo-tagged Photographs.
ix. Operation and Maintenance manual to be provided to each beneficiaries
x. Submission of handing over certificates of solar photovoltaic water pumping system signed by beneficiary and duly certified by DNRE&H;
xi. Performance report for 1 day after commissioning based on data received from remote monitoring system or data logger in cases, where internet services are not available
xii. An undertaking shall need to be submitted by the Contractor certifying that the civil work will withstand the wind speed of 150 km/hr in all weather conditions

Stage II: - Balance 10% i.e. on completion of one month from the date of completion certificate and submission of insurance details of solar pumps installed to the concerned district offices/farmers

Note: -

- The Department of New & Renewable Energy, Haryana & HAREDA reserves right to seek any additional documents / information / certification it deems fit prior to the release of any payment relevant to the SWPS.
- Payment will be made to the bidder after submission of Invoice complete in all respect i.e. with all the required documents and compliance of relevant terms & conditions of the work order duly accepted & certified by DNRE&H subject to availability of fund. .
- If the invoice is incomplete in any respect or if there is any non-compliance with relevant Terms & Conditions of the work order, payment due date shall start from the date of submission of all necessary documents provided relevant terms & conditions of work order have been fulfilled.

12. Jurisdiction of the Court

Any dispute between the Contractor and DNRE&H in respect of this contract shall be settled in the Court at Panchkula, Haryana only.

13. The other terms and conditions shall remain the same as per the NIT.

14. The formats of the Joint Commissioning Report (JCR), Certificate from Project Officer/ Asstt. Project Officer, Handing Over Certificate & Warranty Card, Details Of After Sale Service Centers etc. are enclosed herewith.

15. The details of sites is attached herewith

16. Acknowledgement

Please acknowledge receipt of this work order and confirm your acceptance. This Work Order is subject to verification of related Bank Guarantees submitted by the contractor.

(PK Nautiyal)
Scientific Engineer 'A',
for Director, NRE&HAREDA
Haryana, Panchkula

Endt. No. 7107 - 7129 Dated 24/09/2020

A copy of the above is forwarded to the following for information and further necessary action please:

1. The Secretary, Ministry of New & Renewable Energy, GoI, Block No.-14, CGO Complex, Lodhi Road, New Delhi-110003,
2. All the Additional Deputy Commissioner-cum-CPOs in the State. **It is also informed that the copy of the above is available on the official website of HAREDA i.e.hareda.gov.in. You are also requested to send only the compiled lists of beneficiaries regarding JCR to this office as per the enclosed format.**

(PK Nautiyal)
Scientific Engineer 'A',
for Director, NRE&HAREDA
Haryana, Panchkula

JOINT COMMISSIONING REPORT (JCR) OF INDIVIDUAL BENEFICIARY
(To be kept in district office)

Name of System	____HP _____TYPE CAPCITY SOLAR WATER PUMPING SYSTEM
Work order no. & date	
Supplier :	
Total Work Order Quantity (nos.)	
Date of Supply of Material by the firm	
Date of complete installation and commissioning of the system (s) by the firm	
Date of Handing over the system(s) to the beneficiary	
Details of Beneficiary: (SARAL ID Name, Address etc.)	
Certified that ONE no. of ___ HP _____Solar Water Pumping Systems in reference to work order no. ..... Dated..... and further pre-dispatch inspection carried out on Dated:..... has been installed and commissioned at the place mentioned above and taken over the system by beneficiary in good working condition:	

Signature of Supplier
Name:

Signature of PO/APO
Name:

NOTE: If required, additional sheet may be used.
* List of beneficiaries along with beneficiary wise details of material may be attached.

JOINT COMMISSIONING REPORT (JCR)
(To be submitted to Head Office)

Name of District :

Name of Item :

Name of Firm :

Work order no. and date :

Total Quantity (as per work order) :

Quantity ordered for district :

Details of Beneficiaries :

SARAL ID No.	Name of Beneficiary	Complete Address	Contact No.	Date of pre-dispatch inspection	Date of supply of material	Date of complete installation and commissioning	Delay, if any (in days)

It is certified that:

1. The above said..... nos. of .... HP ..... type Solar Water Pumping Systems in reference to the said work order have been installed and commissioned at the places mentioned and taken over the system by beneficiary in good working condition and the beneficiary(ies) has given this in writing.
2. The firm has also submitted the RMS data and Geo-tagged Photographs of each site.
3. The firm has provided Operation, Instruction and Maintenance Manual to the individual beneficiary.
4. The firm has submitted the report with labelled photograph regarding completion of village community training, awareness/ sensitization, capacity building measures undertaken and development of entrepreneurship etc. in each village.
5. The firm has submitted the handing over certificates of solar photovoltaic water pumping system duly signed by beneficiary and has been duly certified by PO/APO of the district;
6. The firm has submitted the Performance report for 1 day after commissioning based on data received from remote monitoring system or data logger in cases, where internet services are not available
7. The firm has submitted the undertaking, certifying that the civil work will withstand the wind speed of 150 km/hr in all weather conditions.
8. The **Certificate from Project Officer/ Asstt. Project Officer** have been issued to the said beneficiaries. Also, the **Handing Over Certificate & Warranty Card** have been provided to each beneficiary.

Signature of Supplier
With seal
Name:

Signature of PO/APO
with seal
Name:

Counter Signature
ADC-cum-CPO

Certificate from Project Officer/ Asstt. Project Officer

(To be kept in district office)

Following are certified in reference to work order no..... dated ..... for supply, Installation & commissioning of 2/5/7.5/10 HP Solar Water Pumping System, installed by the supplier M/s.....

1. The material supplied is as per pre-dispatch inspection clearance of the approved team of the DNRE&H.

2. The system has been installed & commissioned in good condition as per technical specification of tender document.

3. The work has been completed on dated: ..... {With in stipulated period / with a delay of ..... days}.

4. Instruction Manual and Guarantee Card have been provided to beneficiaries.

5. The Supplier has provided basic training to the beneficiaries for day to day care & maintenance of the system/ plant.

6. The name, complete address, contact person and contact number along with e-mail address of the supplier has been provided to the beneficiaries.

Signature of the beneficiary

Signature of Project Officer/
Asstt. Project Officer,
With seal

HANDING OVER CERTIFICATE & WARRANTY CARD
(TO BE PROVIDED TO EACH BENEFICIARY)

It is hereby certified that following system with following details has been commissioned & handed over to the user in satisfactory working condition. It is further certified that the system has been covered with five years warranty as per the terms & conditions of the contract.

S. No.	Items	Details
1	Pump capacity & type	
2	Work Order No. & date	
3	SARAL ID No. Name of Beneficiary (with mobile number)	
4	Exact location on installation (latitude-longitue)	
5	Date of installation	
6	Warrantee expire on	
7	Name & Address of the Manufacturer / supplier of the system : Contact Number: e-mail:	
8	SPV Modules installed Sr. No. Make Model	
9	Motor Pump Sr. No. Make Model	
10	Motor Pump Controller Sr. No. Make Model	
11	Mechanical component and installation as per NIT	Yes/No
12.	Earthing provided	Yes/No
13	Training for operation & maintenance of the system	Provided/not provided
14	Technical literature, operation & maintenance manual in English/ Hindi	Provided/not provided
15	(In case of complaint dial number .....or e-mail at ..... for complaint lodging)	

(Signature)
Authorised signatory
of Contractor with seal

(Signature)
Name of beneficiary:
Contact No.:

(Signature)
Project Officer/ Asstt. Project Officer
(with seal)
(Project Officer will retain 01 copy for office record and one will be with user)

DETAILS OF AFTER SALE SERVICE CENTRES IN THE DISTRICT

DISTRICT :

NAME OF THE FIRM :

S. No.	Name of Dealer/centre	Complete Address	Name of contact Person with Contact Number and e-mail ID

SIGNATURE & SEAL OF THE FIRM

(Signature)
Name.....
PO/APO (with seal)

QUARTERLY PROGRESS/INSPECITON REPORT

DISTRICT :

NAME OF THE FIRM :

It is certified that the said firm has installed a total of _____ nos. of _____ capacity_____type solar water pumping system in the district.

Out of total _____ nos. of systems, _____ systems are working satisfactorily and the remaining _____ nos. Of systems are out of order as per details given below:

Sr. No.	SARAL ID no.	Name of Beneficiary & Address	Contact No.	Out of order, since (date)	Nature of defect	Delay in repair, (more than 3 days) (in days)

SIGNATURE & SEAL
OF THE FIRM

(Signature)
Name.....
PO/APO (with seal)