

**BID DOCUMENT  
(NIB No. REIL/RE/2021-22/HLS/21116)**

**FOR**

**THE WORK OF SUPPLY, INSTALLATION, COMMISSIONING & 5 YEARS COMPREHENSIVE MAINTINANCE OF“  
WHITE LED (W-LED) BASED OFF-GRID SOLAR HOME LIGHTING SYSTEMS” FOR ELECTRIFICATION OF UE  
HHs in VILLAGES & DHANIES IN RAJASTHAN**

**ISSUED BY**



**RAJASTHAN ELECTRONICS & INSTRUMENTS LIMITED, JAIPUR  
(AN ISO 9001: 2015 & 14001: 2015 “MINI RATNA” PUBLIC SECTOR ENTERPRISE)  
2, KANAKPURA INDUSTRIAL AREA, SIRSI ROAD,  
JAIPUR-302034  
TEL NO: 0141- 2470908, FAX –0141-2470531  
E-mail: sr.nirmal@reil.co.in, website: www.reiljp.com**

**Important Dates**

**Last Date & Time for submitting e- tender : 30/11/2021 up to 02.00 PM**

**Date & Time for submitting of hard copy of tender : 01/12/2021 up to 12.00 PM**

**Date & Time for opening of e-tenders : 01/12/2021 at 02.00 PM**

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**PART- I**

**RAJASTHAN ELECTRONICS & INSTRUMENTS LTD. (REIL),**  
2, Kanakpura Industrial Area, Sirsi Road, JAIPUR – 302034  
Tel. No. 0141-2470531/2470908, Fax –0141-2470531  
Website: [www.reiljp.com](http://www.reiljp.com) Email: [sr.nirmal@reil.co.in](mailto:sr.nirmal@reil.co.in)

**NOTICE INVITING BID**  
**(NIB No. REIL/RE/2021-22/HLS/21116)**

Rajasthan Electronics & Instruments Limited (REIL), Jaipur invites e-bids, from interested bidders for undertaking the work of supply, installation, commissioning & 5 years comprehensive maintenance of “ white led (w-led) based off-grid solar home lighting systems” for electrification of ue HHs in villages & dhanies in Rajasthan

The bid shall comprise of Technical Bid and Commercial Bid. The detailed scope of work, terms and conditions etc. are available with the Bid Document.

Tender documents can be downloaded from our website [www.reiljp.com](http://www.reiljp.com) or website of CPPP [www.eprocure.gov.in](http://www.eprocure.gov.in).

1. The details for Bid are as follows:

<b>S. No.</b>	<b>Item</b>	<b>Description</b>
1	Last date for online submission of Bid	30.11.2021 up to 2:00 Hrs IST
3	Last date for physical submission of Technical Bid document	01.12.2021 up to 12:00 Hrs IST
4	Opening of Technical Bid	01.12.2021 , 2:00 Hrs IST
5	Opening of Commercial Bid	To be informed later to bidders successful in the technical bid
8	Address for: Submission of sealed Technical Bid, and Opening of Bids	Dy. General Manager (MM,PPC&GST), Rajasthan Electronics & Instruments Limited, 2, Kanakpura Industrial Area, Sirsi Road, Jaipur – 302 034

REIL reserves the right to postpone the date of receipt of bids, reject the whole or part of any or all bids received, without assigning any reason.

Dy. General Manager (MM,PPC&GST)

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## SECTION-I

### INSTRUCTION TO BIDDERS

**E-Tendering Procedure:** The procurement shall be carried out through submission of online tenders only. No offer in physical form will be accepted and any such offer if received by REIL will be out rightly rejected. Tender documents can be downloaded from our website [www.reiljp.com](http://www.reiljp.com) or website of CPPP [www.eprocure.gov.in](http://www.eprocure.gov.in). Final bids are to be submitted on website [www.eprocure.gov.in](http://www.eprocure.gov.in). Any changes modification in the tender enquiry will be intimated through above websites only. Tenderer are therefore, requested to visit our Website regularly to keep themselves updated.

The bidder should have a valid Digital Signature certificate issued by any of the valid certifying Authorities to participate in the online tender.

The bids shall be uploaded in electronic form only through e-tendering system on website [www.eprocure.gov.in](http://www.eprocure.gov.in) .

**Note: e- Procurement system does not allow submission of documents after due date of tender. Incomplete form or non-submission of documents to verify details may result into rejection of your offer and no communication shall be done for submission of documents.**

1. **PROCEDURE FOR SUBMISSION OF BIDS:**  
**The Bid Should Be Submitted in 'Two Bid' System: -**

**PART -1 TECHNICAL BID:**

Technical Bid alongwith tender documents (duly signed on each page) to be uploaded in the e-tender portal. Technical Bid to be opened by the REIL committee

- a. The hard copy of technical bid duly completed and signed on each page, should be submitted along with the "**TECHNICAL BID**" and other supporting documents. Hard copy from the bidders who have participated in e-bid will only be accepted.
- b. Board resolution/ Power of Attorney / Authorization letter for signing of the bid document from the bidder be submitted.
- c. Prices / Costs of the items **should not be** indicated anywhere in the Technical Bid. This should be followed meticulously failing which the bid is liable to be rejected.

The Technical Bid to be kept in a sealed envelope super-scribed with "**Technical Bid for work of supply, Installation, commissioning & 5 years comprehensive maintenance of "white led (w-led) based off-grid solar home lighting systems"** for electrification of ue HHs in villages & dhanies and addressed to the Dy. General Manager (MM,PPC&GST), Rajasthan Electronics & Instruments Ltd., 2 Kanakpura Industrial Area, Sirsi Road, Jaipur- 302034.

**PART-2, PRICE BID: -**

Price Bid format given with tender is to be uploaded after filling all relevant information like basic prices, taxes & duties. The Price bid should be uploaded strictly as per the format available with the tender failing which the offer is liable for rejection (remaining or changing format of price sheet will not be accepted by system). **REIL reserve the right to distribute the work.**

2. **LATEST HOUR FOR RECEIPT OF THE BID:**

Your bid must reach this office not later than the date and time notified in the bid notice stated in the BID DOCUMENT. Any bid received after that shall be rejected. In the event of the stipulated date of opening of the bid being declared a closed holiday for Government offices, the date of opening of the bid (s) will be the next

working day. Bid sent by hand delivery, should be delivered at this office not later than the due date and time stipulated in the schedule of bid.

**3. OPENING OF BID:**

Opening of bid (technical bid) will be done at time and date notified in the bid. The **Price/ Financial bids** of the bidders whose technical bids are found technically suitable only will be opened later. **The decision of the evaluation committee on technical suitability shall be final & binding.**

**4. PRICES:**

- a. Prices are to be quoted **in Indian Rupees**.
- b. Prices quoted in the Price/Financial Bid must be meaningful and measurable in the context.
- c. The prices quoted must be per unit shown in the BOQ. Where no specific mention GST or other duties, the quoted rate shall be **deemed to be inclusive of such taxes / charges**
- d. Price must be quoted in original sheet of BOQ failing which the same is liable to be rejected
- e. Offer shall be valid for 90 days from the date of bid opening
- f. Work may be distributed on L1 prices.

**5. QTY.: Up to 6000 nos. Approximately (Rate Contract basis in Rajasthan). This quantity may increase up to 50% and decreased as per requirement.**

6. Offer shall be valid for 90 days from the date of bid opening.

**7. SECURITY DEPOSIT:**

- i. Security Deposit 5% of the contract value shall be submitted by successful bidder in the form of BG/DD/RTGS valid till completion of the project including warranty period and CMC period.

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## SECTION-II

### 1. ELIGIBILITY CONDITIONS:

**Complete Scope of work including Supply of Material, Installation – Commissioning & 5 years CMC**

#### **A) TECHNICAL CRITERIA:**

1. Bidder shall be manufacturer of SPV Module or LED Light Fixture or Electronic Assembly or Battery or Electric Cable or Mechanical Structure or SPV System Integrator who has supplied and installed cumulative 500 kWp SPV Systems / 1000 Nos. of SPV Home Lighting Systems/ 1000 Nos. of SPV Street Light System in Govt. / PSU sector/ Private Sector during last 5 years & has also maintained / is also maintaining SPV Systems for at least one year.

The details of work experience shall be given separately as per the following format:

S. No.	Name of Agency	P.O. No., date	Quantity allotted	Quantity Supplied and Installed	Date of supply and completion of I&C work

Copies of supply and I&C work orders shall be appended as supporting documents. Bidder must produce proof of satisfactory completion against the indicated work/supply orders from the beneficiary organizations.

2. Bidder should not be blacklisted in any PSUs/Government/Semi Government / Quasi Government department in India, as on date of submission of bid. In this regard, bidder has to furnish undertaking that they are not blacklisted by any of the above mentioned organization as per enclosed Format-IX.
3. The bidder shall submit valid test report of tendered white led (w-led) based off-grid solar home lighting systems (complete system) from MNRE accredited lab. If report is not available at the time of submission of bid, the same shall be submitted prior to supply of material. In that case, bidder has to submit an undertaking towards submission of test report prior to supply of material.

#### **B. FINANCIAL CRITERIA:**

1. Bidders' who are quoting for Complete Scope of work including Supply of Material, Installation, Commissioning & CMC for 5 years should have an average turnover of Rs. 5Crore in last three financial years and with positive net worth. A certificate by CA be submitted in support of above Turnover and Net Worth of the bidder.

In addition to it, following documents be also submitted:

- a. Balance sheet for last three years.
- b. Turnover and Net worth value duly certified by CA last three years.
- c. Photocopy of the last Three years Income Tax Return.
- d. Details of any Loan taken from Financial Institutions/ Banks along with bank letter to be submitted by bidders Photocopy of GST & PAN No. etc. Solvency Certificate to be submitted by Bidder Declaration that firm is not blacklisted by any government department/ PSU.
- e. Authorization Letter / Power of Attorney to sign the bid.
- f. Any other relevant documents.

## 2. OTHER CONDITIONS:

- A) **Responsibility for executing Contract:** The bidder shall be fully responsible for the execution of the contract in all respects in accordance with the terms and conditions as specified in the acceptance of bid.
- B) The bidder shall not sublet transfer or assign the contract or any part thereof without the written permission of the DGM (MM,PPC&GST). In the event of the bidder contravening this condition, DGM (MM,PPC&GST) be entitled to place the contract elsewhere on the bidder's account at his risk & cost and the bidder shall be liable for any loss or damage, which the DGM(MM,PPC&GST), may sustain in consequence or arising out of such replacing of the contract.
- C) **Document:** The bidder should have a valid **PAN / Other statutory document as applicable** and produce attested copies of such certificates along with the bid papers in Technical Bid, failing which the bid is liable to be rejected. Check list to be attached.
- D) **Right to accept/ reject:** REIL reserves the right to **reject** any or all bid without assigning any reason whatsoever. Also, the REIL authority reserves the right to **award** any or part or full contract to any successful agency at its discretion and this will be binding on the bidders.
- E) The quantity of the SPV Systems shown in the bid can be increased or decreased depending upon the actual requirement.
- F) **Assistance to bidder:** The bidder shall not be entitled for assistance either, in the procurement of raw materials required for the fulfillment of the contract or in the securing of transport facilities.
- G) REIL reserve the right to distribute the work among the eligible bidder on L1 rate depending on their financial capability, experience, field maintenance strength & Bid status.
- I) REIL reserves the right to relax the eligibility conditions.
- J) The bidder should have established maintenance network. (Submit detail description of maintenance network available).



**SECTION-III**  
**SCOPE OF WORK**

**1. INRODUCTION:**

The scope of work includes supply, installation, commissioning & 5 years comprehensive maintenance of “ white led (w-led) based off-grid solar home lighting systems” for electrification of ue HHs in villages & dandies.

Scope of work covers survey, identification of beneficiaries as per AVVNL/JDVVNL’s conditions, supply, installation, testing, commissioning and 5 years comprehensive maintenance of Solar Photovoltaic Home Lighting System (HLS) for electrification of UE HHs in the un-electrified villages/Dhanies/Habitations situated in the State conforming to technical specifications enumerated in relevant Annexure of this Tender. Detailed scope of work is provided hereunder:-

**1.1 Work of installation& ongoing maintenance of HLS shall involve:**

- (a) Survey, Identification and engagement of prospective/interested unelectrified household in the villages & Dhanies (As per list provided by AVVNL/JDVVNL/JVVNL ) along with uploading of complete details on AVVNL/JDVVNL /JVVNL website.
- (b) Collection of application and consent of beneficiaries for supply and installation of systems from unelectrified households and deposited in AVVNL/JDVVNL/JVVNL.
- (c) Entering into supply and maintenance contract agreements with AVVNL/JDVVNL.JVVNL.
- (d) Completion of work of supply, installation, commissioning and testing as per schedule given at the time of allotting targets.
- (e) Supplier will essentially upload the verified documents (from AVVNL/JDVVNL after physical verification of installations) along with location coordinates (Longitude and Latitude of beneficiary residence where system installed) on AVVNL/JDVVNL website as per directions before submission the claims for payment. Verified copies of statements of GPS coordinates shall be submitted to SE (DDUGJY), AVVNL/JDVVNL/JDVVNL & REIL fortnightly.
- (f) **Rectification of Faults:** All the Successful bidder shall be bound to develop their “After sales service centres” in the vicinity of the area of the installed systems or at least at tehsil level /at central location to facilitate CMC services. The beneficiaries should be well informed about the CMC centre of vendor, call centre/toll free numbers. The Successful bidder will educate the Beneficiaries on the process for registering the complaints on Call Center/toll free nos. After registration of complaint, system faults will have to be rectified within 7 days from the date of registration of complaint at call centre. Successful bidder will update the status of fault rectification on AVVNL/JDVVNL website /call centre for online monitoring of the complaints registered and services being provided by the vendor. **AVVNL/JDVVNL/JVVNL reserves the right to allot any areas / districts / villages/Blocks to Successful bidder.**

**1.2 Eligible Beneficiary for off-grid SPV Home Lighting Systems:**

Un-electrified Households of Villages/dhanies (as per list of AVVNL/JDVVNL/JVVNL ) will be the eligible beneficiaries for consideration. Eligibility of the villagers residing in these villages/dhanies will be established through a self-certificate furnished by the potential beneficiary accompanied by a requisite form of identification (Aadhar Card /Voter ID card /Driving License) and further verification by Sarpanch/Ward Panch/Panchayat Secretary or School Teacher of the same Gram Panchayat area.

Note:-The Quantity of SPV HLS to be installed as per the Clusters

**(Village/block//District’s) shall be distributed in lots as below:-**

Lot No	Area	Tentative Quantity of SPV HLS
1.	Various villages under JVVNL/AVVNL/JDVVNL	5000

**This quantity may further increase decreased as required by REIL.**

## SECTION –IV

### TECHNICAL SPECIFICATIONS

#### SPECIFICATION FOR WHITE LED (W-LED) BASED SOLAR BASED HOME SYSTEMS(SOLAR POWER PACKS)

A solar home system (SHS) provides a comfortable level of illumination in one or more rooms of a house. The SHS consists of a PV module, control electronics, battery and luminaire(s). The Systems featuring 5 numbers of luminaires based on White Light Emitting Diode (W-LED) and could be used to run a small DC fan and/or a 12-V DC television with mobile charging. For common facilities viz. PanchayatBhawan, school and HH electrification etc above standalone system shall be used.

The System consists of :

- SPV Module (with Module Mounting Structure) : 200 Wp
- Battery: 12.8 Volts, 80 Ahr. (approx. 1000 Watt hours minimum capacity ) **LithiumFerro phosphate / Lithium Ion.**
- Solar Charge Controller with MPPT to appropriately charge and protect the battery against overcharge.
- Load :
  - a) 5 Nos. of White Light Emitting Diode (W-LED) Luminaire (7.0 Watts each) for 5-6Hrs./day
  - b) 1 D.C. Fan (18-20Watts) ( Table Fan/ Pedestal Fan) for 5-6 Hrs./day
  - c) Power for a 12V DC TV (max. 25 watts) set [ to be purchased separately ] (Optional for5-6 hrs./day
  - d) Provision for Mobile Phone Charging
  - e) Online Monitoring shall also be conducted through mobile phone sms (feature to built in).

#### TECHNICAL DETAILS

##### PV MODULE (S):

- i. Indigenously manufactured PV modules should be used.
- ii. The PV modules should be made up of crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II/BIS 14286 from an NABL or IECQ accredited Laboratory.
- iii. **The module efficiency should not be less than 15%.**
- iv. The terminal box on the module should have a provision for opening, for replacing the cable,if required.
- v. There should be a Name Plate fixed inside the module which will give :
  - a. Name of the Manufacturer or Distinctive Logo.
  - b. Module Number
  - c. Serial Number
  - d. Year of manufacture
- vi. A distinctive serial number starting with NSM will be engraved on the frame of the module or screenprinted on the tedlar sheet of the module or inside the module lamination. .

##### BATTERY:

- (i) **Lithium Ferro phosphate type battery only.**
- (ii) Capacity : 12.8V, 80Ah [1000 Watt Hour (Minimum)].
- (iii) Maximum Depth of Discharge 90%
- (iv) Battery/Battery cells should conform to the latest BIS/International standards.

## **LIGHT SOURCE :**

- (i) FIVE light sources shall be with 7.0 Watts of white LED and Light Output should be Minimum 25 Lux when measured at the periphery of 2.5 meter diameter from a height of 2.5 meter.
- (ii) At any point within area of 2.5 mtr diameter periphery the light level should not be more than three times of the periphery value.
- (iii) The illumination should be uniform without Dark Bands or abrupt variations and soothing to the eyes. Higher output would be preferred.
- (iv) The colour temperature of W-LEDs used in the system should be in the range of 5500 K-6500 K.
- (v) LEDs should not emit ultraviolet light.
- (vi) The light output from the W-LED light source should be constant throughout the duty cycle.
- (vii) The lamps should be housed in an assembly suitable for indoor use.

## **ELECTRONICS:**

- (i) The total electronics efficiency should be at least 85%.
- (ii) Electronics should have temperature compensation for proper charging of the battery throughout the year.
- (iii) The idle current should be less than 30 mA[ considering three LED indicators & Remote Monitoring].
- (iv) The voltage drop from module terminals to the battery terminals should not exceed 0.6 volts including the drop across the diode and the cable when measured at maximum charging current.
- (v) The PCB containing the electronics should be capable of solder free installation and replacement.
- (vi) Necessary lengths of wires/cables, switches suitable for DC use and fuses should be provided.

## **ELECTRONICS PROTECTIONS:**

- (i) Adequate protection is to be incorporated under "No Load" condition.
- (ii) The system should have protection against battery overcharge, deep discharge condition.
- (iii) Load reconnect should be provided at 50% of the battery capacity status.
- (iv) Adequate protection should be provided against battery reverse polarity.
- (v) Fuses should be provided to protect against short circuit conditions.
- (vi) Protection for reverse flow of current through the PV module(s) should be provide.

## **MECHANICAL COMPONENTS :**

### **(i) Module Mounting Pole (MMP) :**

Module Mounting Pole (MMP) as per drawings should be installed alongwith the Hot dipped galvanised (minimum 80 microns) pole for mounting of SPV modules at site. The panel frame structure should be capable of withstanding a minimum wind load of 150 Km per hour, after grouting and installation. MMP should be of 75MM dia and 3 mm thick and 4 Meter length. MMP should be sturdy & designed to assist SPV Modules to render maximum required strength. The hardware (fasteners) used for installation of SPV Modules & MMP should be of suitable Stainless Steel (SS 304). Each MMP should be grouted as per drawing (Enclosed). Each Module should be fastened by theft proof nut-bolts.

- (ii) The frame structure should have provision to adjust its angle of inclination to the horizontal, so that it can be installed at the required tilt angle from horizontal.
- (iii) Light source should be either for wall mounted or ceiling mounted or can be hung from the ceiling in a stable manner, as per site requirements.
- (iv) A vented plastic/wooden/metallic box with acid proof corrosion resistant paint for housing the storage battery indoors should be provided.

#### **INDICATORS:**

- (i) The system should have three indicators (1) Green-----Charging under process, (2)Yellow ----Battery discharged & (3) Red ----System is in fault.
- (ii) The green indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged.
- (iii) Yellow indicator should indicate the battery "Load Cut Off" condition &
- (iv) Red indicate that system is in fault /loose connection etc.

#### **QUALITY AND WARRANTY :**

- (i) **The Solar home system including Battery will be warranted for a period of five years from the date of supply.**
- (ii) **The PV module(s) will be warranted for a minimum period of 25 years from the date of supply.** PV modules used in Solar Home Lighting System must be warranted for their output peak watt capacity, which should not be less than 90% at the end of Ten (10) years and 80% at the end of Twenty five (25) years.
- (iii) The Warranty Card to be supplied with the system must contain the details of the system. The manufacturers can also provide additional information about the system and conditions of warranty as necessary.

#### **OPERATION and MAINTENANCE MANUAL:**

An Operation, Instruction and Maintenance Manual, in English and the local language, should be provided with the Solar Home System. The following minimum details must be provided in the Manual :

- (i) Basic principles of Photovoltaics.
- (ii) A small write-up (with a block diagram) on Solar Home Lighting System – its components, PV module, battery, electronics and luminaire and expected performance.
- (iii) Significance of indicators.
- (iv) Type, Model number, voltage & capacity of the battery, used in the system.
- (v) The make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of W-LEDs used in the lighting system must be indicated in the manual.
- (vi) Clear instructions about mounting of PV module(s).
- (vii) Clear instructions on regular maintenance and trouble shooting of the Solar Home Lighting System.
- (viii) DO's and DON'T's
- (ix) Name and address of the contact person for repair and maintenance.

**Note: A complete set of Material with specific make should get approved from REIL prior to supply. REIL reserves the right to get the sample tested by MNRE approved lab.**

**Detail of Material to be supplied for:**

**SPV Home Lighting System (200 Wp)**

<b>S.No.</b>	<b>Item:</b>	<b>Capacity</b>	<b>Quantity</b>	<b>Standards</b>
1.	PV Module	200 Watt	1 No of 200 Wp OR 2 Nos. 100 Wp.	Crystalline- Mono/Poly, Qualifying MNRE Standards.
2.	Pole with Module Mounting frame structure	Suitable for 200Wp Module.	1 Nos.	As per specifications.
3.	Battery Bank :	Lithium FerroPhosphate[ LiFePO4 ]Battery12.8 V(DC), 80Ahminimum Capacity	1 No.	Single cell of the battery should be of capacity : 3.2V, 40 Ah or 80Ah. Conforming to BIS/ International Standards.
4.	MPPT Charge Controller with Remote Monitoring provisions.	Suitable MPPT integrated DC charge controller	1 No.	Conforming to specifications and standards
5.	Cable (Module-controller-Battery)	2Cx2.5 Sq. mm (Copper Cable)	10-12 Meter. (Minimum)	Qualifying MNRE/BIS/IEC Standards.
6.	Cable (Controller – Fixtures/appliances)	2Cx1.5 Sq. mm (Copper Cable)	30 Meter. (Minimum)	Qualifying MNRE /BIS/IEC Standards.
7.	Electrical Appliances to be supplied with the system:	Fixture of LED Batten type Luminaries of 7 Wp each with inbuilt driver & control Electronics.	5 No.	Conforming to specifications and standards
		DC Fan (15-20W)	1 No.	As per specifications.
		12V, TV Socket	1 No.	Of standard quality.
		USB Port for Mobile Charging in built in charge controller with multipin connector	1 No.	Of standard quality.
8.	Balance of Systems	As per requirement	As per requirement	Of certified quality standard.

**Note : Housing of Battery and Charge controller :**

The charge controller and Battery be housed in one enclosure [Made of Steel /PPCP/ABS/Poly Carbonate] with suitable segregation of battery and charge controller & other electronics. All connection points of the loads should be on upper /back side of the box. The steel enclosure shall be powder coated of good pleasant colour and in front side following should be written by good quality printed :

**“ SOLAR HOME LIGHTING SYSTEM INSTALLED UNDER SCHEME BY AVVNL/JDVVNL/JVVNL ”**

### Minimum Technical Parameters:

Name of Product	S.No:	Details of Specifications :	Standards/Parameters :	Remarks :
<b>SPVModule :</b>	1.	PV Capacity	200 Watt Minimum	Mono/Poly Crystalline only. Test report as per
	2.	Module Efficiency	15%	IEC/BIS standards should be furnished.
	3.	Cell Efficiency (Minimum)	16%	
	4.	Fill Factor	>70%	
<b>Battery</b>	1.	Lithium Ferro Phosphate(LiFePO4) Battery Capacity	12.8V, 80Ah(Minimum) at 25Degree Celcius. With required quality BMS.	Test report issued by MNRE/BIS approved test house should be furnished.
	2.	Capacity of individual cell	3.2V, 40Ah or 3.2 V, 80Ah.	Cells Conforming to BIS/International Standards. Test report should be furnished.
	3.	Type of Cell	Prismatic/Cylindrical	
	4.	Nominal Capacity	80 Ah	
	5.	Voltage Range	10.5V-14.8V(+/-1%)	
	6.	Total Energy	1024 Wh	
		Configuration	4 in series and maximum 2 in parallel.	
	7.	Charging Current	10A	Rated Charge current
			20A	Maximum Charge current
	8.	Discharging Current	10A	Rated discharge current
			20A	Maximum discharge current
		Charging cut-off voltage :	14.8 V. (+/-1%)	
	9.	Discharge cut-off voltage	10.5 V.(+/-1%)	
10.	Cycle Life	>2500 Cycles	The cycle life is defined as the number of complete charge/discharge cycle that the battery discharges to 80% capacity of its original capacity. Cycle life delivered at 25degree C.	
11.	Working temperature Range	-20 Degree C to 50 Degree C		
12.	Maximum depth of discharge	90%		
	13.	Battery Management	(i) Disconnect or Shut down the load whenever the voltage of a battery cell falls to less than 2.5V.	

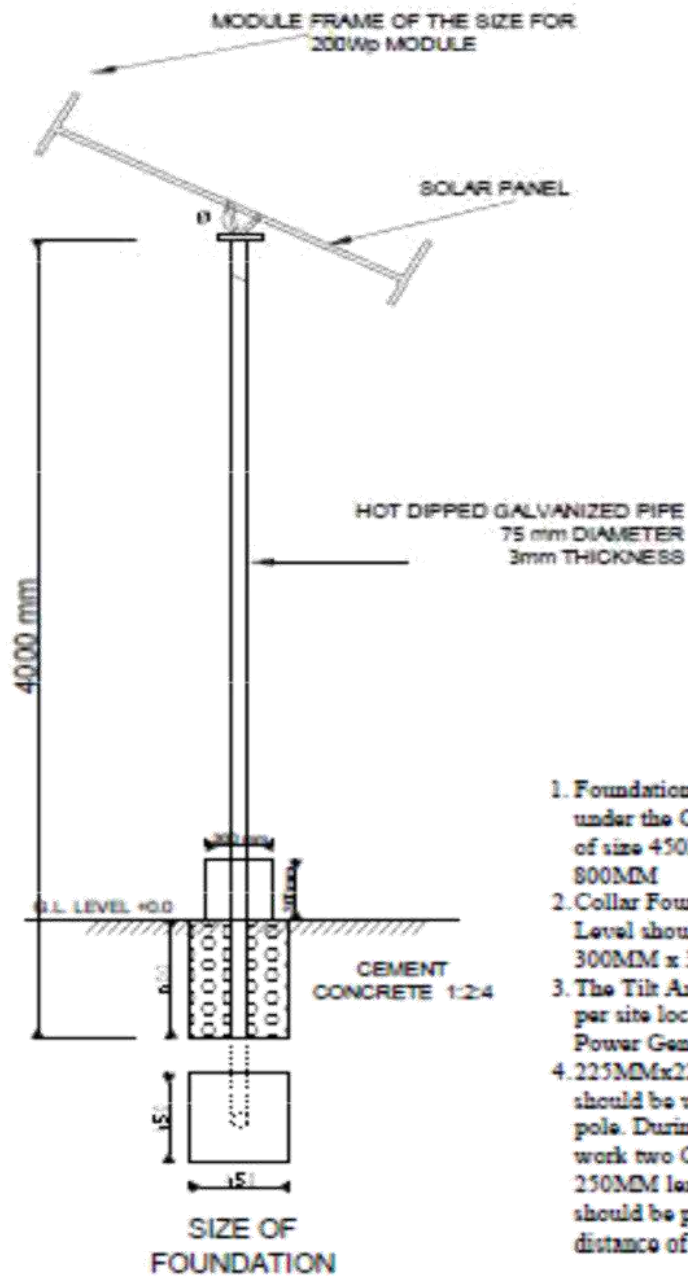
		System(BMS)		
			(ii) Stop the charging process when ever the voltage of battery cell increases to more than 3.8 V.	
			(iii) Shut down the system whenever the temperature of cell exceed 50° C.	
		<b>Note : Certificate of MNRE/BIS approved /authorized test lab [Attached with scope of testing authorized by BIS/MNRE to the lab] should be furnished.</b>		
LIGHT SOURCE [LED Batts]	1.	Watt consumption	7 Watt	IES LM-79-08
	2.	Maximum current drawn	0.6 Amp	
	3.	Minimum output Lumens	90 Lumen/watt	Permissible standard tolerance maximum 3%.
	4.	Total Electronic Efficiency :	>= 85%	
	5.	Colour Temperature Range	5500-6500 Degree K.	
	Note : 1. The illumination should be uniform without dark bands or abrupt variations, and soothing to the eye. Higher light output will be preferred. The light output from the white LED light source should be almost constant.			
	2. The lamps should be housed in an assembly suitable for indoor use. The temperature of heat sink should not increase more than 30 degree Centigrade above ambient temperature even after 48 hrs of continuous operation. Heat Sink Material used in the LED batten should be of Aluminum in order to have good heat dissipation and thermal management for ensuring the better life of the luminaries with high quality Polycarbonate diffuser for achieving soft and glare free light.			
	3. Mid power LED of CREE /NICHIA /OSRAM / PHILIPS / LUMILEDS / LEDNIUM/ LG Make or equivalent (Having LM 80 test report & Photo Biological safety test as per IEC-62471/2006 ) shall only be use.			
	2. The LEDs should have life time (L70) of minimum 50,000 hrs as per LM80.			
	5. The lumen depreciation of LED luminaire shall not be more than 30% at 35,000 burning hours. [ LED shall comply with LM 80 standards and copy of test certificate should be submitted. The test certificate should be from NABL & MNRE accredited lab authorized for testing of LED Luminaries as LM 79 reports.]			
MPPT Charge Controller :	1.	Charge controller Type :	Microprocessor Based Maximum Power Point Tracking (MPPT)	
	2.	Charging Type :	CC-CV (buck charging)	
	3.	BMS Integration	The CCU should be compatible with BMS of LFP Battery.	
	4.	MPPT Solar Charge Controller Rating	12.8V, 20A	
	5.	Charging current range	10-20 A	
	6.	Solar Input Power	200Wp	
	7.	Idle Current [Self Consumption]	<30mA.	
	8.	Indicators	Green-----Charging under process,	

			Yellow ----Battery discharged & Red ----System in fault.	
	9.	Battery Voltage Setup :	High Volt cutoff setting – 14.8 V (+/-1%),Load disconnect at Battery lowVolt:10.5(+/-1%) Volt.	
	10.	Protections :	<input type="checkbox"/> Surge	
			<input type="checkbox"/> Overcharging/Deep discharging	
			<input type="checkbox"/> Overload-Auto shutdown and restart at50% battery level	
			<input type="checkbox"/> Solar and Battery Reverse Protection	
			<input type="checkbox"/> Reverse current from battery in Night.	
<b>Certificate of MNRE authorized test lab should be furnished.</b>				
<b>DC Fan :</b>	1.	Type of Fan	The fan should Non oscillating Mini Pedestal fan ( Minimum 80 cm Height of centre of blade from Ground)15-20 Watt -12Volt DC operated.	
	2.	Type of Motor :	BLDC	
	3.	Rated voltage :	12V	
	4.	Operating voltage range :	11.2 Volt to 14.6 Volt.	
		Maximum Current consumption :	1.67 Amp	
	5.	Sweep Size :	300 mm(Minimum diameter)	
	6.	Blades:	Three leaves [ Aluminum Powder Coated/AcrylnitrileButadiene styrene(ABS)/Polycarbonate (PC)/PPCP material]	
	7.	Power Consumption :	15-20 W at 1200 RPM	
	8.	Bearings :	As per standards and requirement.	
	9.	Speed :	Three variable speeds	Certificate of authorized test lab should be furnished.
	10.	Reverse Polarity Protection :	Should be provided.	
	11.	Noise level	< 30 DB.	
	12.	Air Flow/Thrust :	>30 CM/M.	
13.	Motor should be testedfor :	1.Insulation test,2.Temperature Rise test, 3.Reliabilitytest and4. Noise test.		
<b>USB Port :</b>	1.	Maximum Rating :	1 A.  ONE USB portfor mobilecharging shouldbe provided.	



<b>TV Socket :</b>	1.	Maximum Rating :	2.5 Amp.	
<b>Module Mounting Pole and Structure Remote Monitoring System :</b>	1.	Requirement :	As per drawing enclosed.	
In built Remote Monitoring facility in MPPT Charge controller should be available and should provide following data record at a fixed interval for system health analysis (time interval will be finalized by AVVNL/JDVVNL as per requirements):				
(i)	Battery : BV, BI and BP			
(ii)	SOLAR : SV, SI and SP			
(iii)	LOAD : LV, LI and LP			
(iv)	System Shut down due to fault.			
(v)	Site Coordinates (Latitude and Longitude) of system.			
The Remote Monitoring may be done using GSM/GPRS/SMS and cost for the same will be borne by the supplier. Centralized Software AVVNL/JDVVNL will develop a Centralized Software for Management of the Data. AVVNL/JDVVNL will share a Common API (Application Programming Interface). All the suppliers will perform the following activities:				
□ Follow the procedure for the consumption of the Common API				
□ Send the Data in the prescribed format (individual household details, village, block, district and state and other fields as required) to the Centralized Server in State Data Center of Government of Rajasthan.				
□ The data may be pushed in encrypted format.				
□ The frequency of sending the data may be variable				
<b>Supplier Portal</b>				
□ The data shall be stored in a central server maintained by the system supplier.				
□ The supplier will provide Login and Passwords to AVVNL/JDVVNL to view the Desired				
<b>Reports in prescribed formats (Common for all Suppliers)</b>				
□ Graphical dashboard (configurable)				
□ The supplier will maintain the data in their software for at least of One year.				
□ The supplier data should be in downloadable format in EXCEL & PDF.				
<b>Installation &amp; Fittings</b>	Supplier will install the system and all wires will run in the conduit with proper fittings.			

## DRAWING FOR INSTALLATION OF SOLAR PANEL FOR HOUSEHOLD STAND ALONE SYSTEM



## SECTION -V

### GENERAL TERMS & CONDITIONS OF THE CONTRACT& PAYMENT TERMS

**RAJASTHAN ELECTRONICS & INSTRUMENTS LIMITED, JAIPUR**

#### GENERAL TERMS AND CONDITIONS

**1) AMENDMENT:**

Except as otherwise provided herein, no addition, amendment to or modification of the Contract shall be effective unless it is in writing and signed by and on behalf of both parties.

**2) SEVERABLEITY:**

In the event that any or any part of the terms conditions or provisions contained in the Contract shall be determined invalid, unlawful or unenforceable to any extent such term, condition or provision shall be served from the remaining terms, conditions and provisions that shall continue to be valid and enforceable to the fullest extent permitted by law.

**3) CONFIDENTIAL TREATMENT:**

It is understood and agreed that data, know-how and other such proprietary information that was provided or will be provided by either party, will remain confidential.

**4) RELATIONSHIP OF THE PARTIES:**

REIL relationship with Supplier will be that of a Business Associate, and nothing in this Contract shall be construed to create a relationship, joint venture, partnership.

**5) INDEMNITY:**

REIL and the Supplier will indemnify, defend, and hold harmless each other and its divisions, successors, subsidiaries and affiliates, the assigned of each and their directors, officers, agents and employees from and against all liabilities, claims, losses, and damages of any nature, including, without limitation, all expenses (including attorney's fees), cost, and judgments incident there to REIL and REIL's obligations under this indemnity will survive the expiration, termination, completion or cancellation of this Contract or an order hereunder.

**6) FORCE MAJURE:**

REIL and the Supplier shall not be under any liability to each other or to any other party in any way whatsoever for the destruction, damage, delay or any other matters of the nature arising out of reasons beyond the control of either party, including but not limited to a war, rebellion, civil commotion, strikes, lock-outs and industrial disputes; fire, explosion, earthquake, Act of God, flood, drought, bad weather, requisitioning or other act or order by any government department, council or other constituted body, and similar other reasons.

**7) RESTRICTION ON EMPLOYMENT:**

Both the parties have agreed that they will not recruit any members of staff of other party directly or indirectly.

**8) ARBITRATION:**

All disputes arising out of this contract and questions relating to its interpretation etc. shall be referred to the contract committee headed by ED/GM and if not resolved shall be referred to the sole arbitration of Managing Director, Rajasthan Electronics & Instruments Ltd., for his decision, which shall be final and binding on both parties. The Venue of Arbitration proceedings shall be at Jaipur.

**9) RISK AND COST:**

In the event of failure on the part of the contractor in the installation and commissioning of goods and services, which is required in view of the pending orders, REIL shall be entitled to cancel the remaining order and procure the outstanding quantity through other sources at risk and costs of the contractor.

**10) TERMINATION OF CONTRACT:**

REIL shall be entitled to terminate this Contract, in the event of any or all or any of the following events, with a written notice of 15 days with due consent of the Bidder: -

- i. has abandoned the Contract
- ii. has without valid reason failed to complete the projects in respect of the contract.
- iii. persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just and proper cause.

**11) DURATION OF CONTRACT:**

This contract shall take effect on the day of execution of this contract and shall endure for the period of 5 year from commissioning of SPV Power Pack and renewable as per mutual agreement.

**12) GOVERNING LAW:**

This contract and its validity, interpretation and performance will take effect and be governed under the laws of India. Venue in any action in law or equity arising from the terms and conditions of this contract shall be the court of appropriate jurisdiction in Jaipur, Rajasthan (India)

**13) CONTRACT:**

Before execution of the work, security deposit be submitted and a contract agreement for execution of the work shall be signed by the bidder with REIL within 7 days of LOI from REIL. In case agreement is not executed within the stipulated time, earnest money will be forfeited.

**14) PAYMENT TERM:**

The payment of billed amount (Supply, Installation and Commissioning) of SPV Home systems shall be released under the programme only after such funds received from funding agencies as per following terms:

(i) **90% amount after receipt of claim** (Supply, Installation and Commissioning) from the contractor with following documents duly verified by AVVNL/JDVVNL's concerned Nodal Officer/authorized AVVNL/JDVVNL Officer will be made by REIL within 21 days from the date of submission of invoice along with relevant documents & after release of REIL payment from AVVNL/JDVVNL/JVVNL.

- a. Invoice issued by the successful bidder to the beneficiaries.
- b. Date of commissioning.
- c. Model
- d. Make
- e. Serial Nos. of PV modules, Batteries and Balance of systems.
- f. Address proof of beneficiary like Ration Card, Aadhar card, Voters Identification Card number etc.
- g. Two Photographs of beneficiary with installed system(The Photograph must match with the photograph in the ID proof). As far as possible, photograph of installed system should be taken with person whose ID proof is being taken but in case at the time of taking Photograph the ID proof person is not available at his /her residence, spouse's photograph may be taken with installed system.
- h. Copy of Agreement with beneficiary for maintenance (Annexure-9)
- i. Copy of installation certificate duly signed (with seal) by Sarpanch/Gram Sevak cum Panchayat Secretary/Patwari/ School Principal of local Govt. School {Annexure- 10}.
- j. Signing of Contract Agreement with Nigam.

[ Two sets of documents (a) to (i) must be prepared & one copy be submitted to PO & second copy, duly verified from concerned PO, AVVNL/JDVVNL, to AVVNL/JDVVNL HQ Jaipur along with bill of Payment claim and these beneficiaries details should also be uploaded on AVVNL/JDVVNL website with mentioned documents ].

However, it should be noted that AVVNL/JDVVNL at its discretion may undertake additional physical verification (of upto 5% of the number of systems installed) by a committee of head office representatives either in all regions or in selected regions randomly twice in contract tenure. In cases of any discrepancies identified during this physical verification, AVVNL/JDVVNL may withhold release of balance payment till all rectifications have been completed to the satisfaction of AVVNL/JDVVNL.

- (ii) **Balance 10% will be released to the vendor after 60 months of handing over the system** after successful completion, commissioning and charging in all respect and also subject to clearance/ verification of 3rd party inspection& received of REIL payment from AVVNL/JDVVNL/JDVVNL.

B. The Contractor shall provide comprehensive maintenance services as under :

- (i) The supplier shall develop service centre at tehsil head quarters/ at local block level as asked by JDVVNL essentially and every beneficiary should be well informed about the concerned service centre for lodging their complaint.
- (ii) Supplier shall ensure half yearly routine maintenance of system.
- (iii) The supplier shall timely attend to faults as and when arrive/reported, The faults should be attended within 3 days from lodging of complaint and rectify within 7 days period. If this is not attended as per this schedule, penalty shall be imposed as under :
  - (a) If the fault is not attended within 3 days from lodging of complaint and not rectified in maximum 7 days period, JDVVNL will deduct Rs. 20/- per day /per site as penalty on excess days beyond 7 days.
  - (b) If the fault is not rectified in 30 days from lodging of complaint, JDVVNL will deduct the entire cost of the system from amount withheld as PBG security.
  - (c) A register shall have to be maintained at every service centre which will be verified by concerned Nodal officer or other officers of JDVVNL during inspection and site visits.

The Successful bidder shall ensure timely and satisfactory resolution of the faults. All faults should be attended by the supplier within 7 days of lodging of complaint by the beneficiary. Supplier will maintain a register of complaints & rectification of same. This will be verified by Nodal officer & other JDVVNL officers during visits.

- C. In case the supplier/bidder fails to provide proper maintenance of the systems to the beneficiary and number of complaints/dissatisfaction of beneficiaries regarding system performance & about CMC services, REIL at his discretion conclude by forfeiture of **all outstanding amount with REIL (Performance security) and action against the firm will also be taken for debarring & black listing.**

15) **OTHER TERMS & CONDITIONS:**

- i Compliance with Regulations and Indian Standard: - All works shall be carried out in accordance with relevant regulations, both statutory & those specified by the Indian standard related to the works covered by this specification. In particular, the equipment and installation will comply with the following: -
  - a. Work man's compensation act.
  - b. Minimum wages Act.
  - c. Payment wages Act.
  - d. Contact Labour regulation & abolition Act.
  - e. ESI, PF & Bonus Act.
  - f. Regulation under Indian Electricity Rules,
  - g. Safety & Electrical Standard as applicable
- ii Watch & Ward: -

The contractor shall supply material from his godown for installation work at site, shall continue to be responsible for their safe custody till they are installed in position, tested, commissioned and handed over to beneficiaries as per format provided by REIL.
- iii Contractor shall arrange for compliance with statutory provision of safety regulation and departmental requirements of safety codes in respect of labour employed on the work by the contractor. Failure to provide such safety requirements would make the contractor liable for penalty. The departmental will be at liability to make arrangement for the safety requirements at the cost of the contractor & recover the cost thereof from him.
- iv Company shall not be held liable or responsible for any illness and for physical harm sustained by the contractor authorized representative during the execution of this agreement as they will not be deemed in any manner as employee of the company.
- v The contractor authorized representative shall take due care in handling the SPV system under this contract. Unwarranted activities, if found any, the company shall be authorized to recover the same from the contractor.
- vi Correction, over-writing and alteration should be initialed and dated by the Vendor otherwise the bid is liable to be rejected. The bid shall be typed or written in ink. Unit rates should be mentioned in the specified format failing which the bids are not likely to be considered.

- vii All Vendors shall therefore, furnish declaration that their firm is not involved in any litigation that may have an impact of affecting or compromising the delivery of services as required under this assignment. It is also to be declared that their firm has not been black listed by any Central/State/ Public Sector Under takings in India. The declaration should be verified by the Notary Public.
- viii The Vendor shall sign these conditions on each page at the end in token of acceptance of all the terms and it would be attached with the bid along with the declaration mentioned in above. He should also sign at the bottom of each of the pages of his bid to be submitted
- ix The company reserves the right to visit and inspect any site under this contract at any time and if defects are noted, payments may be stopped / recovered from contractor. The company reserves the right to terminate this contract without giving any notice, if in the opinion of the company, the performance of the contractor is not found satisfactory and according to terms stipulated by this contract.
- x The company shall be fully absolved from the third party claims and damages during the execution of the contract.
- xi All disputes arising out of this contract and questions relating to its interpretation etc. shall be referred to the sole arbitration of Dy. General Manager (RE), Rajasthan Electronics & Instruments Ltd., for his decision, which shall be final and binding on both parties.
- xii The contract agreement shall be executed at Jaipur and shall be subject to Jaipur court jurisdiction alone.
- xiii. The company shall deduct the TDS as per the Income Tax Act.
- xiv. The contractor shall be fully responsible for all repairs of the defects in maintenance during the period under contract.
- xv. The contractor shall not be entitled for assistance either, in the procurement of raw materials required for the fulfillment of the contract or in the securing of transport facilities.
- xvi. Any other work which is not mentioned here but required for successful commissioning of the SPV Power Pack shall be done by the contractor at no extra cost.
- xvii. Any work/contract conditions imposed by REIL shall also be applicable on the contractor.

**16). DELIVERY OF MATERIAL:**

REIL reserves the right to take delivery of material at site (Rajasthan State)/ FOR REIL Jaipur.

- Supply of material within 10 days from the issue of LOI

**17. Completion period :**

REIL will award LOT wise work to successful bidders. The work is to be completed **WITHIN THREE MONTHS FROM DATE OF LETTER OF INTENT**. REIL may extend this period at its discretion.

The firms shall submit their bills for SPV HLS installation completed to respective REIL on monthly basis along with required documents/papers and obtain receipt of the same from authorized REIL official. REIL will be informed about this along with receipt of REIL office & list of beneficiaries within next 10 days.

The Final bill must be submitted to authorized REIL official not later than 20 days after expiry of the scheduled time period & REIL should be informed within the following 20 days along with receipt of Nodal office & list of beneficiaries.

**Completion Schedule:-**

- i. **Within one month of receipt of LOI-30% of work awarded.**
- ii. **In next one month after (i) 35% of work awarded.**
- iii. **In next one month after (ii) 35% of work awarded.**



Delay in submission of bills to REIL office with the receipt of JDVVNL AVVNL's Nodal office & list of beneficiaries after 20 days from scheduled date for completion of work as per schedule will attract penalty as under :-

If the Contractor fails to comply with the Time for Completion in accordance with the norms for the whole of the facilities, (or a part for which a separate time for completion is agreed) then the Contractor shall pay to the Employer a sum equivalent to a **quarter of a percent (0.25%) of the Contract Price** for the whole of the facilities, (or a part for which a separate time for completion is agreed) as liquidated damages for such default and not as a penalty, without prejudice to the Employer's other remedies under the Contract, for each week or part thereof which shall elapse between the relevant Time for Completion and the date stated in Taking Over Certificate of the whole of the Works (or a part for which a separate time for completion is agreed) subject to the limit of **ten percent (10%)** of Contract Price for the whole of the facilities, (or a part for which a separate time for completion is agreed).

However, if the Contractor completes the work for whole of the facilities within the contracted time period, the Employer may then refund back the LD which was deducted on account of delay in completion of a part of a work for which a separate time for completion is agreed.

The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any money due or to become due to the Contractor. The payment or deduction of such damages shall not relieve the

#### **18.) Inspection: As per REIL AND JDVVNL/AVVNL/JVVNL requirement**

# SECTION - VI

## FORMATS & ANNEXURES



(On bidder's letter head and signed, stamped before uploading and to be submitted by bidder )

**COVERING LETTER**

No.

Date:

Dy. General Manager (MM,PPC&GST),  
Rajasthan Electronics & Instruments Limited,  
2, Kanakpura Industrial Area,  
Jaipur-302034  
Rajasthan.

Sub: Rate contract for work of supply, installation, commissioning & 5 years comprehensive maintenance of “ white led (w-led) based off-grid solar home lighting systems” for electrification of ue HHs in villages &dhanies under“ scheme”

Ref: NIB No. REIL/RE/2021-22/HLS/21116

Dear Sir,

We hereby submit our offer in full compliance with terms & conditions of the above NIB.

We confirm that, we have the capability for supply, installation, commissioning & 5 years comprehensive maintenance of “ white led (w-led) based off-grid solar home lighting systems” for electrification of UE HHs in villages & dhanies under“ scheme”

Based on capacity to carry out work within the specified time of this bid, we are quoting as per following:

Sr. No.	Item Description	Name of State	Quantity Offered in Nos.
1.	Rate contract for work of supply, installation, commissioning & 5 years comprehensive maintenance of “ white led (w-led) based off-grid solar home lighting systems” for electrification of ue HHs in villages & dhanies under“ scheme”	Rajasthan	

Regards,

Signature with company seal

Name-

Designation



(On bidder's letter head and signed, stamped before uploading and to be submitted by bidder )

**AUTHORIZATION CERTIFICATE**

No.

Date:

Dy. General Manager (MM,PPC&GST),  
Rajasthan Electronics & Instruments Limited,  
2, Kanakpura Industrial Area,  
Jaipur-302034  
Rajasthan.

Sub: Rate contract for work of supply, installation, commissioning & 5 years comprehensive maintenance of “ white led (w-led) based off-grid solar home lighting systems” for electrification of ue HHs in villages &dhanies under“ scheme”

Ref: NIB No. REIL/RE/2021-22/HLS/

Dear Sir,

We M/s. ....are authorizing Mr. .... to submit tender document in reference to your NIB no **REIL/RE/2021-22/HLS/21116** Dated ..... for Rate contract for work of supply, installation, commissioning & 5 years comprehensive maintenance of “ white led (w-led) based off-grid solar home lighting systems” for electrification of ue HHs in villages & dhanies under“ scheme”on our behalf. He is authorize to carry out communication and negotiations on our behalf.

On behalf of company .....

Name and Designation

Signed and sealed (who has signed the tender)



FORMAT -III

**PROCESS COMPLIANCE FORM**

(Tenders are required to print on their company's letter head and signed, stamp before uploading)

To

**M/s. Rajasthan Electronics & Instruments Limited  
2, Kanakpura Industrial Area, Sirsi Road,  
Jaipur-302034**

**Sub: -Acceptance to the process related Terms and Conditions for the e-Tendering**

Dear Sir,

**This has reference to the Terms & Conditions for e-Tendering mentioned in the NIBNo.: -REIL/RE/2021-22/HLS/21116**

We hereby confirm the following: -

- 1) The undersigned is authorized representative of the company.
- 2) We have carefully gone through the NIT, Tender Documents and the Rules governing the e-tendering as well as this document.
- 3) We will honor the Bid submitted by us during the e-tendering.
- 4) We undertake that if any mistake occurs while submitting the bid from our side, we will honor the same.
- 5) We are aware that if REIL has to carry out e-tender again due to our mistake, REIL has the right to disqualify us for this tender.
- 6) We confirm that REIL shall not be liable & responsible in any manner whatsoever for my/our failure to access & submit offer on the e-tendering site due to loss of internet connectivity, electricity failure, virus attack, problem with the PC, digital signature certificate or any other unforeseen circumstances etc.

With regards

Signature with company seal

Name-

Designation

E-mail Id:

## RAJASTHAN ELECTRONICS &amp; INSTRUMENTS LIMITED, JAIPUR

**COMMERCIAL TERMS AND CONDITIONS**

S.no.	Term	Description	Complied / Not Complied	Deviation if any
1	GST	Extra as applicable. Please specify the current rate.		
2	Terms of payment	As per tender document		
3	Rate	Firm rate for contract period.		
4	Offer validity	90 day from the date of bid opening.		
5	Quantity Variation	Quantity may increase or decrease depending upon the requirement.		
6	Completion Period	As per tender document		
7	GST No:	GST no is essential for participating in this Tender. Kindly provide your GST No:		
8	MSME Clause	It is mandatory for MSME bidders to declare their Udhog Aadhar number on CPPP portal, failing which such bidders will not able to enjoy the benefits of procurement policy for MSE and also attach the certificate along with annexure.		
9	Note	Corrigendum and extension if any will be hosted on website ( <a href="http://www.eprocure.gov.in">www.eprocure.gov.in</a> ) only. Please check regularly for further information update.		
11	Other	Part-I (Technical and Commercial Offer) to be opened by the REIL committee.  Part-II (Price Offer): Only those bidders whose offers are technically and commercially acceptable after evaluation of the technical and commercial offer will be opened & evaluated by the committee.		

**SIGNATURE WITH STAMP**



**CERTIFICATE FOR NON BLACK LISTING**

Date

To  
Dy. General Manager (MM,PPC&GST),  
Rajasthan Electronics & Instruments Limited,  
2, Kanakpura Industrial Area,  
Jaipur-302034  
Rajasthan.

Ref: NIB No. REIL/RE/2021-22/HLS/21116

Dear Sir,

We M/s. ....confirm that we are not blacklisted in any PSUs/Government/Semi Government / Quasi Government department in India, as on date of submission of bid. This undertaking is submitted to the best of my knowledge. If at any stage it is found wrong, then REIL may take necessary action against us.

On behalf of company .....

Name and Designation

**RAJASTHAN ELECTRONICS & INSTRUMENTS LIMITED, JAIPUR**

**CHECK LIST**

Sr. No.	Required Documents		Remark
1	SECTION-I	Instruction To Bidders	
2	SECTION-II	Eligibility And Other Conditions	
3	SECTION-III	Scope of Work	
4	SECTION-IV	Technical Specifications	
5	SECTION-V	Payment Terms & Others Conditions	
6	SECTION-VI	FORMAT - I : Covering Letter for Part –A,B &C	
		FORMAT - II : Authorization Certificate for Part –A,B &C	
		FORMAT - III : Process Compliance Form	
		FORMAT - IV : Commercial Terms and Conditions	
		FORMAT - V : Certificate for Non Black Listing	
		FORMAT - VI : Check List	
		FORMAT - VII : Offer Item Make	

**OFFER ITEM MAKE**

To,

Dy. General Manager (MM,PPC&GST.),  
Rajasthan Electronics & Instruments Limited,  
2, Kanakpura Industrial Area,Jaipur-302034Rajasthan.

Sub: Rate contract for work of supply, installation, commissioning & 5 years comprehensive maintenance of “ white led (w-led) based off-grid solar home lighting systems” for electrification of ue HHs in villages &dhanies under“ scheme”

Ref: NIB No. REIL/RE/2021-22/HLS/21116

S. No.	Item:	Capacity	Offer make	Quantity
1.	PV Module	200 Watt	REIL only	1 No of 200 Wp OR 2 Nos. 100 Wp.
2.	Pole with Module Mounting frame structure	Suitable for 200Wp Module.		1 Nos.
3.	Battery Bank :	Lithium Ferro Phospathe [ LiFePO4 ] Battery 12.8 V(DC), 80Ah minimum Capacity		1 No.
4.	MPPT Charge Controller with Remote Monitoring provisions.	Suitable MPPT integrated DC charge controller		1 No.
5.	Cable (Module-controller-Battery)	2Cx2.5 Sq. mm (Copper Cable)		10-12 Meter. (Minimum)
6.	Cable (Controller – Fixtures/appliances)	2Cx1.5 Sq. mm (Copper Cable)		30 Meter. (Minimum)
7.	Electrical Appliances to be supplied with the system:	Fixture of LED Batten type Luminaries of 7 Wp each with inbuilt driver & control Electronics.		5 No.
		DC Fan (15-20W)		1 No.
		12V, TV Socket		1 No.
		USB Port for Mobile Charging in built in charge controller with multipin connector		1 No.
8.	Balance of Systems	As per requirement		As per requirement

Signature with company seal  
Name-  
Designation

PART-II

ANNEXURE -VIII

PRICE (FINANCIAL) BID

(NIB No.REIL/RE/2021-22/HLS/21116)

(To be submitted online)

Part A: For Bidder who is quoting for Complete Scope of work including Supply of Material, Installation – Commissioning & 5 years CMC

(AS PER SCOPE OF WORK)

NAME OF BIDDER \_\_\_\_\_

SN.	Description	Unite Price (Rs.) (inclusive of all taxes)
1	<b>Supply Part</b> :supply of material for white led (w-led) based off-grid solar home lighting systems” for electrification of ue HHs in villages &dhanies under“ scheme”	
2.	<b>I &amp; C Part:</b> Installation, commissioning & 5 years comprehensive maintenance of “ white led (w-led) based off-grid solar home lighting systems” for electrification of ue HHs in villages &dhanies under“ scheme”	
3	Cost of SIM & data charges for 5 year online monitoring	
	<b>Total (Rs.)</b>	

Date:-

(SIGNATURE OF BIDDER)



