REGD. From

RATE CONTRACT

The Director General, Supplies & Disposals, Haryana, S.C.O. No. 09 (1st & 2nd Floors), Sector-16, Panchkula. Tel. Nos. 0172-2570121-124. Fax No. 0172-2570121, E-mail: supplies@hry.nic.in

To

M/s KLK Ventures Pvt. Ltd.; 1517, Hemkunt Chambers 89, Nehru Place, New Delhi Mb. No. 9811046241 Email:- director.klk@gmail.com

Memo No :- 42/HR/RC/E-5/2022-23/ Dated Panchkula the:-

Sub:-

Annual Rate Contract for the Supply of 1800 Nos. Solar Home System for families of Vimukt Ghumantu Jati and Schedule Caste of the Haryana State required by the New & Renewable Energy Department Haryana & HAREDA (Sr. No. 09).

Dear Sir,

With reference to your Tender No. & dated and this office acceptance letter No. & Dated and your letter No. and Dated given in Schedule "A", on the subject noted above, I have to inform you that your offer has been accepted for the supply of stores to the terms & conditions given in the Schedule "A" and "B".

- 2. I enclose herewith an agreement form in duplicate and request that the agreement may be executed on a non-judicial stamp paper of Rs.15/- signed and returned to this office within 10 days from the date of issue of this letter. One copy of the agreement will be sent to you duly executed on behalf of Governor of Haryana for your record. You may kindly send power of attorney in favour of the person/persons who is/ are authorized to signed the agreement together with/their specimen signature duly attested by a Magistrate or Oath Commissioner or Resolution of the firm authorizing the persons to sign the documents on behalf of the firm.
- 3. The Contract shall come into force from the date of its issue and shall remain operative upto i.e 25-10-27. Government reserves the right to bring any other party on the rate contract at any subsequent stage during the pendency of this rate contract.
- 4. The store must confirms to the approved specification as given in Schedule "A" attached, failing which the same shall be rejected at your risk and cost.
- 5. The inspection of the material will be carried out by the Indenting Officers or their authorized representatives at your premises before dispatch.
- 6. The supply must be completed within the stipulated delivery period failing which the risk purchase will be affected against you and the excess cost thus incurred will be recovered from you. Delayed supplies shall be accepted under penalty clause of the Schedule "B" unless the delivery period is extended by the competent authority.

- 7. The Director, Supplies & Disposals, Haryana reserves to himself the right to obtain contracted items of stores when available from any Govt. Deptt./ approved source without prejudice to this contract.
- 8. Failure to execute agreement/effect supplies within the stipulated period, repeatedly offering supplies liable to rejection or without prior inspection may render your earnest money/security liable to forfeiture, debarring your firm in addition to other remedies as available under the terms of the contracts.
- 9. All cases, where payments are not made within time, should be referred to this office for taking necessary action against the defaulters.
- 10. Your attention is particularly invited to the provision of Schedule "B" regarding the compliance with requisitions, preparation and submission of bills and quarterly submission of statement of supplies.
- way the lowest price at which you quote/ supply the stores of identical description of stores to GeM/State Govt./Central Govt./Institutions/undertaking/ any other person during the delivery period/ currency period of the rate contracts. If at any time during the delivery/ currency period, you reduce the rate, sale price of quoted stores to any person at the price lower than the price chargeable under this supply order/ contract, you are required to inform this office and price payable under the supply order/contract for the stores supplied after the date of coming into force of such reduction of rates shall stand correspondingly reduced to that level. You shall promptly notify the reduction of rates to this office as well as to concerned Indenting Officers/ consignees. You shall also give a certificate on your bills that the rates charged by you are not in any way higher to these quoted to the GeM and other state govt. central govt. Institutions etc. during the corresponding period. The Indenting Officer shall be required to ensure that requisite certificate is given by the concerned firm on the bills before releasing their payments.
- 12. All disputes will be settled only within the jurisdiction of Head Quarters of the Directorate of Supplies & Disposals, Haryana, Panchkula.

Please acknowledge the receipt of this letter.

Yours faithfully,

Deputy Director

Director General, Supplies & Disposals, For & On behalf of Governor of Haryana Dated:-

Endst. No- 42/HR/RC/E-5/2022-23/

A copy of Schedule 'A' showing the prices accepted along with conditions of supply (ii) Schedule "B" i.e. conditions of contract are forwarded to the Director General, New & Renewable Energy Department Haryana & HAREDA, Sector-17, Panchukula w.r.t. their Indent No. HAREDA/2022/6752 dated 09.01.203 for information and necessary action.

- 1. He may indent for the requirement of the goods included in the Schedule "A" attached direct on the approved contractors under intimation to this office.
- 2. The security deposited by the firms would be released after two months of the termination of the contract and he is therefore, requested to send the complaints, if any, against the contractors to this office within this limit for settlement, failing which no complaint or claim will be entertained.

- 3. The Inspection shall be arranged by the Indenting Officer/Consignees or their authorized representatives at destination before releasing the payment of the supplies. The stores should be accepted only after satisfactory inspection and issue of proper inspection note showing the acceptance of the material as per approved specifications.
- 4. Please report all cases in which contractor fails to effect supply within the delivery period stipulated in the Schedule "A" after the expiry of stipulated delivery period to this office for effecting purchase at the risk and cost of the contractors failing which all responsibility will rest with Indenting Officers/Consignees for not effecting risk purchase within prescribed period.

Deputy Director
Director General, Supplies & Disposals,
For Director General, Supplies & Disposals, Haryana
Dated:-

Endst. No- 42/HR/RC/E-5/2022-23/

A copy is forwarded to the Deputy Excise & Taxation Commissioner, New Delhi following for information & necessary action.

They are requested to ensure that the GST is paid by the firm to government against this rate contract.

Deputy Director Director General, Supplies & Disposals, For Director General, Supplies & Disposals, Haryana

Endst. No- 42/HR/RC/E-5/2022-23/ 17 32 0

Dated: 26-10-23

A copy is forwarded to the following for information and action:-

1. The Accountant General (Audit), Haryana, Sector-33, Chandigarh.

2. The Controller of Stores, Punjab, Chandigarh.

3. The Controller of Stores, Himachal Pradesh Nigam Vihar, Shimla.

4. The Controller of Stores/Director of Industries and Commerce, J&K, Shrinagar.

5. St. Section O/o DGS&D, Haryana. 6. Programmer O/o DGS&D, Haryana.

7. Departmental Processing Charges branch o/o DGS&D, Haryana

Deputy Director
Director General, Supplies & Disposals,
For Director General, Supplies & Disposals, Haryana

SCHEDULE -"A"

Accepted rates of M/s KLK Ventures Pvt. Ltd.; 1517, Hemkund Chambers 89, Nehru Place, New Delhi, Mb. No. 9811046241, Email:- director.klk@gmail.com, offer No. Nil dated 18.01.2023 and your letter dated 29.08.2023, this office acceptance letter No. 15779 dated 20.09.2023 & your letter No. Nil dated 03.10.2023.

Sr. No.	Name of items	Qty. In Nos.	Rates in Rs. per system., inclusive of GST @ 12%, Freight & FOR Destination etc.
1	Solar Home System	1800	14,250/-

(Details specifications as per DNIT & sample submitted by you and approved by the Technical Committee)

75 WATT SOLAR HOME SYSTEMS (DC MODEL) FOR FAMILIES OF VIMUKT GHUMANTU JATI AND SCHEDULE CASTE OF THE HARYANA STATE

BROAD PERFORMANCE SPECIFICATIONS

PV module	75Wp under STC	
Light source	 2 Nos. of White Light Emitting Diode (Bulb/Batten) Luminaire (max. 5.0 Watts each). The wattage of the LED used in the luminaire should be such that the total input power consumption by the luminaire is not more than 5 W (including the LED driver consumption). The LED lights should meet the latest BIS specification (IS 10322 (Part 5/Sec I):2012) 	
Light Output	Minimum 24 Lux for each luminaire when measured from a height of 2.5 meter in an area of 2.5 meter diameter. The light should be glaze free and should not have any shadow band. The uniformity of light should not be less than 0.7	
Loads in addition to the Lights	 One table Fan of swipe >300mm (15.0 Watt ±10%), BLDC type Provision for 1 USB port for mobile phone charging (5V, 1A) 	
Battery	12.8V 30 Ah Lithium Ferro phosphate (LiFePo4)	
Charge controller	12V, 10 A with LCD display . The charge controller should be of MPPT type and its PV charging efficiency should be >90%	
Working temperature	0° - 45° C	
Autonomy of System	f Minimum 8 hrs	

TECHNICAL DETAILS

PV MODULE (S)

I. Domestically manufactured PV Module with domestically manufactured solar PV cells

should be used. Further, the models and manufacturers of PV Modules shall be included in the List of Models and Manufacturers for Solar PV Modules empanelled by MNRE as per its ALMM order (and shall also valid at the time of supply of material) from time to time.

- II. The PV modules should be made up of crystalline silicon solar cells and the Photovoltaic modules must be BIS certified as per IS 14286 and in addition modules must confirm to IS/IEC 61730-1 requirement for construction and part-2 requirement for testing, for safety qualifications.
- III. The module efficiency should not be less than 15%. Module shall consists of Solar Cell of minimum 5 Bus Bar technology.
- IV. The terminal box on the module should have a provision for opening, for replacing the cable, if required.
- V. The module should have the following minimum information laminated inside the module:
 - a. Name of the Manufacturer or Distinctive Logo.
 - 'b. Model Number (it should indicate the voltage and rated wattage of the module)
 - c. Serial Number
 - d. Year of manufacture
 - e. HAREDA logo (which is available on-line)
 - f. Made in India

BATTERY

- The battery should be Lithium Ferro phosphate having Nominal capacity of 30Ah and Nominal voltage of 12.8V.
- II. The Lithium Ferro Phosphate battery should have appropriate Battery Management System (BMS) to ensure the proper charging and discharging of each cell of battery with proper protection of battery when temperature is reaching beyond permissible limit. BMS should be housed in a portable trolley casing
- II. 90 % of the rated capacity of the battery should be between fully charged & load cut off conditions.
- III. Battery should BIS certified with IS16046:(Part 2):2018 from approved laboratory

LIGHT SOURCE

- (i) The luminaries (Bulb/Batten) should use white LEDs. The colour temperature of white LEDs should be in the range of 5500° K 6500°K. Use of LEDs which emit ultraviolet light will not be permitted.
- (ii) The light output from the white LED light source should be constant through-out the operation of the lights.
- (iii) The lamps should be housed in an assembly suitable for indoor use with an appropriate heat sink to dissipate the heat generated by LEDs during operation. The temperature of LED should not increase more than 20° above room temperature. This condition should be complied for 5 hours of operation of the lamp at a stretch while battery operating at any voltage between the loads disconnect and the charge regulation set point.
- (iv) The luminaries must use the optics and diffuser in order to have uniform and glaze free light.
- (v) The make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of white LEDs used in the lighting system must be furnished along with the system.

(vi) All Luminaries should have ON/OFF switch and fuse.

FAN

The table fan should be 12 volt DC operated with following minimum requirement and the registered manufacturer of the fan should have a valid test report from any of the BIS/NABL/Govt. approved test laboratory for the same:

- i. The fan should be 12V DC operated and table type of size >300mm
- ii. Type of motor:BLDC motor
- iii. Rated voltage: 12 Volt
- iv. Operating Voltage range: 9 Volt to 15 volt
- v. Blade diameter > 300mm
- vi. Blade: Three leaves Aluminum Powder Coated
- vii. Power consumption 15 Watt (±10%)
- viii. Speed: 3 Electronically controlled
- ix. RPM >320 at 12V battery voltage

ELECTRONICS

- i. The charge controller should be of MPPT type
- ii. Electronics should operate at 12 V and should have adequate temperature compensation arrangement for proper charging of the battery throughout the year.
- iii. Necessary lengths of wires / cables, switches and fuses should be provided.
- iv. The system should have separate ports for connecting each load.
- v. The system should have 1 USB ports for connecting loads.
- vi. The idle current i.e. when there is no load and no display, should be less than 40 mA respectively.
- vii. The voltage drop from module terminals to the battery terminals and from battery terminals to loads should not exceed 0.3volts including the dropage across the diode and the cable when measured at maximum charging current.
- viii. The PCB containing the electronics should be capable of solder free installation and replacement.
 - ix. DC operated switches and regulators should be used.

ELECTRONICS PROTECTION

- i. Adequate protection is to be incorporated under "No Load" condition, e.g. when the lamps and other loads are removed and the system is switched ON.
- ii. The system should have protection against battery overcharge, deep discharge
- iii. Load reconnect should be provided at >12.5V and low cut-off should be at 11.3 V $(\pm 0.2V)$.
- 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 provided.

MECHNICAL COMPONENTS

- i. Corrosion resistant frame structure should be provided to hold the SPV module.
- ii. 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.
- iii. A vented plastic/ wooden/ metallic box with acid proof corrosion resistant paint for housing the storage battery indoors should be provided.

INSTALLATION OF SYSTEM

Proper supporting structure to hold solar module shall be provided. Any minor items which are not specifically included in the scope of supply but required for proper installation and efficient operation of the SPV systems, is to be provided by the manufacturer as per standards.

ELECTRIC CABLE

- i. The electric cable used to connect module to charge controller and charge controller to battery shall be twin core PVC insulated water and UV resistance copper cable of minimum size of 4.0 mm². Cable shall meet IS 1554 / 694 Part 1:1988 & shall be of 650 V/1.1 kV.
- ii. Other cables of appropriate size should be used to keep electrical losses to a bare minimum.
- iii. All wiring should be in a proper conduit or capping case. Wiring should be joint less and switches & fan regulator should be of appropriate value and suitable for DC operation.

INDICATORS

The system should have LCD display to indicate charging under progress, load cut-off 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 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:

- Basic principles of Photovoltaic.
- A small write-up (with a block diagram) on Solar Home System its components, PV module, battery, electronics and luminaire and expected performance.
- Significance of indicators
- Type, Model number, voltage & capacity of the battery, used in the system.
- 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.
- Clear instructions about mounting of PV module(s).
- Clear instructions on regular maintenance and trouble shooting of the Solar Home System.
- DO's and DONT's.
- Name and address of the contact person for repair and maintenance.

TERMS & CONDITIONS

- 1- F.O.R.:- The above rates are F.O.R. destination anywhere in Haryana at supplier's risk.
- 2- G.S.T.: 12% Inclusive in above rates.
- 3- Freight Charges: Inclusive in above rates.
- 4- Delivery period:-Two months from the date of placement of work order.
- 5- Warranty: Five years from the date of supply (including batteries) and PV module(s) will be warranted for a minimum period of 25 years from the date of supply. PV modules used in Solar Home 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.

6- Payment :-

- i. 89% payment will be released within one month time on submission of material receipt of physical delivery of inspected/ accepted goods in physically good condition at consignee go down on submission of bill of material supported by material receipt duly signed by PO/APO of the department/ office.
- ii. 10%payment to be released <u>@2%</u>at the end of each year for 5years, on submission of satisfactory performance report of the systems duly certified by the concerned district officer and user OR The said amount may be released against the submission of bank guarantee of equal amount valid for five years from commissioning of the plant.
- iii. 1% will be released after 25 years of satisfactory performance report of Solar Module.

The Indenting Departments would have option to release payments in RTGS/ Electronics mode also.

Delay in payments to the suppliers beyond the stipulated credit period indicated in the supply order, unless supported by cogent reasons and approved by a higher authority, will attract penal interest on the defaulting amount @ Rs.25/- per rupees one lakh per day of delay beyond the stipulated credit period. Non provision of adequate budget will be no ground for delay in payments to the supplier.

7. INSPECTION:- The inspection of the material will be carried out by the committee constituted by Indenting Department or their authorized representatives at the premises of the supplier before dispatch.

In case, the material offered for inspection by the firm fails to meet the specifications stipulated in NIT/Order/Contract and the samples are rejected by the Inspecting Committee, the Indenting Department will have the right to levy a penalty at 0.1% of the total order value. In case, the material offered for inspection fails during the 2nd inspection also, the Indenting Department will have the right to increase the penalty to 0.25% of the total order value. In case, the material offered fails during the 3rd and final inspection also, the firm will be liable for penal action including forfeiture of EMD, risk purchase, debarring/ blacklisting in future, and no further opportunity for inspection would be provided to the supplier firm.

(OTHER TERMS & CONDITIONS WILL BE AS PER DNIT AND SCHEDULE-B ATTACHED).

Encls.a/a

Deputy Director, Director General Supplies & Disposals, Haryana, For & On behalf of Governor of Haryana.