चुरे गाउँपालिका
गाउँ कार्यपालिकाको कार्यालय
घरखेडा, कलैलाली
सुदूरपश्चिम प्रदेश, नेपाल

दररेट पेश गर्ने सम्बन्धि सूचना

<u>प्रकाशित मिति: २०८१/०२/०९</u>

१. चुरे गाउँपालिकाद्वारा विभिन्न निर्माण कार्यका लागि निम्न सामग्री खरिद तथा जडान गर्न दररेट पेश गर्नका लागि यो सूचना प्रकाशित गरिएको छ।

क्रम.सं	विवरण	जम्मा रकम (मु.अ.कर सहित)	दररेट पेश गर्ने अन्तिम मिति र समय	कैफियत
१.	Supply, Delivery and Installation Of Solar System	9,99,531.09 /-	(28th May 2024) 2081/02/15 B.S 5:00 PM	

२. दररेट पेश गर्ने सप्लायर्सले अनिवार्य रुपमा दररेट पेश गर्ने व्यहोरा सम्बन्धको लिखित निवेदन सहित नविकरण भएको फर्म/ कम्पनि दर्ता प्रमाणपत्रको प्रतिलिपि, नविकरण भएको व्यवसायी दर्ता (इजाजत पत्र) प्रमाणपत्रको प्रतिलिपि, मु.अ कर दर्ता प्रमाणपत्रको प्रतिलिपि र आ.व २०७९/०८० को कर चुक्ता प्रमाणको प्रतिलिपि संलग्न गरि पेश गर्नुपर्ने छ।

३. उक्त कार्यको लागि आवश्यक BOQ यस कार्यालयको वेबसाइट <u>https://churemun.gov.np/</u> बाट डाउनलोड गर्न सकिनेछ।

४. BOQ मा आफुले कबोल गरेको रकम अंक र अक्षरमा स्पस्ट बुझिने गरि लेखेर पेश गर्नुपर्ने छ। केरमेट भएको दररेट (BOQ) मुल्यांकनमा समावेश गरिने छैन।

५. यस चुरे गाउँपालिका वार्ड नं ३ को स्वास्थ्य चौकीमा २ KW सोलार व्याकअप जडान, गाउँपालिकाको कार्यालयमा ४ ओंटा 150 Ah Lead Acid Battery जडान तथा ३३ थान २० वाट सोलार सिस्टम खरिद गरि पालिका कार्यालयलाई हस्तान्तरण गर्ने जिम्मेवारी सप्लायर्सको हुनेछ ।

६. दररेट बुझाउने अन्तिम दिन सार्वजनिक विदा परेको खण्डमा त्यस दिन पछिको अर्को दिन कार्यालय समय भित्र कागजात दर्ता गराई बुझाई सक्नु पर्ने छ।

देवी प्रसाद जोशी
प्रमुख प्रशासकीय अधिकृत

प्रमुख प्रशासकीय अधिकृत

Technical Specifications

The purpose of the Technical Specifications (TS) is to define the technical characteristics of the Goods and Related Services required by the Purchaser. The TS, as a part of the schedule of Requirements (SR), constitute a Contract document and are, therefore, a part of the Contract.

The bidder must furnish documentary evidence in the form of literature (catalogue) along with fully finished packaged sample product, certified dimensional drawings, and detailed description of goods with essential technical information. All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

1) Technical Specification of Solar Backup System

Technical Parameters:

1. Solar PV Module				
SN	**Description**	**Technical Specifications**	**Bidder Specifications**	**Bidder's Remarks***
	Manufacturer Name/Brand/ Model			
1.1	**Peak power of Individual Module**	Minimum 200 Wp		
1.2	**Panel Type**	Poly or Mono Crystalline		
1.3	**Certificate**	PV module must be tested and certified according to the standard-"IEC 61215 Edition 2 2005-04 (or EN 61215 Edition OR Latest Edition, ISO 9001, ISO 14001		
1.4	**Power Deviation**	Deviation of maximum power from nominal values stated by the manufacturer must be within -5% to +20% at STC.		
1.5	**Junction Box Protection**	IP 65 or above		
1.6	**Module Efficiency**	At least 15 %		

देवी प्रसाद जोशी
प्रमुख प्रशासकीय अधिकृत

1.7	**Sticker**	PV module must carry the following indelible markings: • Name of manufacturer • Model or Type No. • Maximum rated voltage and current • Open circuit voltage and short circuit current • Serial Number • Nominal power in Wp • Serial Number, Model Name and Brand name must be • laminated inside the glass		
1.8	**Warranty**	The warranty period for the module must be at least 10 years against a maximum 10% reduction and 20 years against a maximum 20% reduction of output power at STC. 3 years warranty for workmanship defect		
1.9	**Manufacturer Experience**	Manufacturer must have at least five years of similar module manufacturing experience		

2. Battery				
SN	**Description**	**Technical Specifications**	**Bidder Specifications**	**Bidder's Remarks***
	Manufacturer Name/Brand/ Model			
2.1	**Battery Type**	Lead Acid Tubular		
2.2	**Battery capacity**	Minimum 150 Ah		
2.3	**Battery Voltage**	12 V_{DC}		
2.4	**Battery Efficiency**	>85%		
2.5	**Operating Temperature**	-5°C to 55°C		

देवी प्रसाद जोशी
प्रमुख प्रशासकीय अधिकृत

2.6	**Pressure Regulation**	The battery shall be provided with pressure regulation Valve. Shall be self- sealable and flame retardant		
2.7	**Self discharge**	Less than 3% per month		
2.8	**Warranty**	3 years warranty		
2.9	**Construction**	Positive Plate: Tubular Plate with Lead or alloy spine grid Seperator: Micro Porous synthetic separator Electrolyte: Sulphuric acid VRLA terminals: Epoxy sealed terminals with threaded lead-plated copper alloy		
2.10	**Battery Life cycle**	At least 1500 at 80% DoD		
2.11	**Certification**	RETS certificate ISO 9001, ISO 14001		
2.12	**Manufacturer Experience**	Manufacturer must have at least Five (5) years of manufacturing Experience		

3. Inverter				
SN	**Description**	**Technical Specifications**	**Bidder Specifications**	**Bidder's Remarks***
	Manufacturer Name/Brand/ Model			
3.1	**Type and capacity**	Hybrid Type, 3 KVA		
3.2	**Inverter output voltage**	Rated AC output voltage of 220/230 V ±5% at battery operating voltage from DC 90% to 120% and maximum load current from 10% to 119% of the rated value.		
3.3	**Manufacturer's experience**	Must have at least 3 years manufacturing experience.		
3.4	**Warranty**	3 years warranty		
3.5	**Information**	Quiescent current drawn by inverter must not exceed 2% of the rated current of inverter. Total Harmonic Distortion THD must be less than 5% of full load		

देवी प्रसाद जोशी
प्रमुख प्रशासकीय अधिकृत

4	**Other Requirements**			
SN	**Description**	**Technical Specifications**		
4.1	**Structure**	The System must have all the structure and installation materials required to mount the solar PV module made of aluminium or metal structure with corrosion proof. The panel must be firmly mounted in support structure to hold it firmly. The support structure should be made of corrosion resistant metallic frame and should withstand the wind speed upto 180km/hr. The panel must be installed at 30 degree to horizontal and facing south. The height of pole must be at least 30 cm from the holding surface. Fasteeners(nuts snd bolts must be stainless steel or hot deep galvanized.		
4.2	**Installation**	The installation must be done by solar technician level I and all the cables must be firmly wired using clips and hooks. Battery must be connected through cable shoe.		
4.3	**Earthing**	The PV module frame and array must be properly earthed and connected to earth electrode via copper wire of 10 SWG and using shortest practical direct route downward that directs the cables away from sensitive electronic equipment and shall not enter the building.. The maximum allowable earth resistance between the array frame and earth electrode is 5 ohms.		

देवी प्रसाद जोशी
प्रमुख प्रशासकीय अधिकृत

4.4	**Cables**	The system must have UV Cable coming from Solar PV Module to control unit. The length of UV cable must be at least 10 meter and the size of the wire should be done in such a way that the power loss is not more than 3%. Cables must be multistrand, PVC insulated cables and UV resistant suitable for outdoor installation. All DC and Ac cables must be of copper		

Supply and Installation of 20 Watt Peak Solar Home System

Specification

Solar Panel

SN	Description	Specification
1.1	Manufacturer Name	
1.2	Brand/Model	
1.3	Module Capacity	Minimum Module Capacity must be 20 watt peak
1.4	PV module Type	Mono or Poly Crystalline or Thin Film
1.5	Operating voltage corresponding to the power output (Vmp)	At least 17 Vmp for each module of 12V
1.6	Minimum Module efficiency at STC:	Crystalline: Minimum 15-16%
1.7	Junction Box	IP 65 or above
1.8	Module Mounted Structure	Non corrosive support structures to be fixed on the roof or at the pole . For areas where there is problem of shading in some of the site of installation, the solar PV module of that particular solar homes system can be installed after clearing all the bushes and the branches of the tree.
1.9	Tilt Angle and direction	towards due south around local latitude
1.10	Fasteners (nuts and bolts)	Stainless Steel or hot deep galvanized.
1.11	Certifications	RETS Certified
1.12	Efficiency	At least 11%

देवी प्रसाद जोशी
प्रमुख प्रशासकीय अधिकृत

2. BATTERY

SN	Description	Specification
2.1	Manufacturer Name	
2.2	Brand/Model	
2.3	Battery Type	Solar deep cycle Lead Acid Batteries
2.4	Battery Voltage	12V
2.5	Battery Efficiency	Minimum 80%
2.6	Battery Capacity	23 Amp/hr @C10
2.7	Self-Discharge	less than 3% per month
2.8	Operating Temperature	-5 °C to 55°C
2.9	Instruction	Charging instructions shall be provided along with the batteries
2.10	Warranty	3 years warranty
2.11	Construction	**Lead Acid Battery:** **Positive Plate:** Tubular Plate with lead or alloy spine grid. **Separator:** Micro porous synthetic separator **Electrolyte:** Sulphuric acid.
2.12	Battery Life Cycle	At least 3,000 cycles at 20% DoD and 1,500 cycles at 70% DoD
2.13	Certification	RETS Certified ISO 9001, ISO 14001 Certificates

देवी प्रसाद जोशी
प्रमुख प्रशासकीय अधिकृत

The following minimum information must be included on the label of the battery and label of battery must be fixed firmly or screen printed on the battery casing:

- ☐ Brand and name of Manufacturer
- ☐ Model and type
- ☐ Rated capacity in Ampere-hours
- ☐ Nominal Voltage

3. Charge Controller

SN	Description	Specification
3.1	Manufacturer Name	
3.2	Brand/Model	
3.3	Type	Solar Charge Controller
3.4	Control Mode	PWM or MPPT
3.5	Working Temperature & Humidity	- Must withstand the rated current from the PV module to battery and from battery to load at an ambient temperature range of -5 degree to 40 degree centigrade
3.6	Protection Function	Solar reverse-charging protection, solar reverse-connection protection, battery over charge protection, battery over-discharge protection, battery reverse-connection protection ,over temperature shutdown
3.7	Size	Minimum 5 amps
3.8	Certifications	RETS Certified

4. Lamp Set

SN	Description	Specification
4.1	Manufacturer Name	
4.2	Brand/Model	
4.3	Type	Light Emitting Diode (LED)

देवी प्रसाद जोशी
प्रमुख प्रशासकीय अधिकृत

4.4	Luminous Efficacy	At least 100 Lumen/watt
4.5	LED Illumination	lamp should have illumination not less than 0.5 Lux/Watt.
4.6	Power	The capacity of light must be 4 W
4.7	Protection	The lamp must be protected against reverse polarity
4.8	Certification	Must submit IP65 or above Compliance Certificate
4.9	Expected Life:	The proposed LED life shall be minimum 30,000 hours
4.10	Certifications	RETS Document

The following minimum information must be included in the screen printed label of the LED Street lamp

a. Brand/Model/Serial number
b. Nominal power in Watt
c. Nominal voltage

देवी प्रसाद जोशी
प्रमुख प्रशासकीय अधिकृत

Chure Rural Municipality

Rural Municipal Executive Office

Gharkheda, Kailali

देवी प्रसाद जोशी
प्रमुख प्रशासकीय अधिकृत

A) Installation Of Solar Backup System In Health Post

Item	Description	Unit	Quantity	Rate		Amount (NRs)	Remarks
				In Figure	In Words		
1	Supply and Delivery of Solar PV Modules 2 KWp (NON VATABLE ITEM)	KWp	2				
2	Supply and delivery of Pure Sine wave inverter (≥ 3,000 VA) with inbuilt charge controller (NON VATABLE ITEM)	pcs	1				
3	Supply and delivery of 150 Ah Lead Acid Battery @C10 12VDC as per attached specification. (VATABLE ITEM)	Pc	8				
4	Supply and delivery of Aluminium/GI Module Solar Panel Mounting Structure with Nuts bolts for 2 kwp as per attached specification and drawing. (VATABLE ITEM)	Set	2				

5	Supply and delivery of Earthing system ((copper coated earthing rod of Diameter ≥25mm and Length ≥1 m) Chemical (25 Kg) Earthing type) (VATABLE ITEM)	Set	1				
6	Supply, delivery and installation of copper lightning protection System with mast of atleast as 1000 mm and at least 2 m elevation pole , 5 nos. of spikes, maximaum discharge current 100 kVA as directed by engineer. (VATABLE ITEM)	set	1				
7	Copper Earthing Wire of 10 SWG (VATABLE ITEM)	Rm	10				
8	TUV certified Single core solar DC cable of 6 sq. mm. (VATABLE ITEM)	Rm	30				
9	2.5 mm PVC insulated NS Standard AC Copper Wire (VATABLE ITEM)	Rm	20				

10	Double Pole AC MCB of 16 A (VATABLE ITEM)	Pc	1				
11	Double Pole DC MCB of 40 A; NS Standard. (VATABLE ITEM)	PC	1				
12	DC Surge Protecting Device (SPD) Type 2 ,600 VDC VPL at 2.8kV, NDC 20kA & MDC 40 kA. Standard IEC 61643-31:2018 or EN 50539-11:2013 (VATABLE ITEM)	Nos	1				
13	16 Amps Power Socket with metal Box , screw,gripss , PVC tape, etc complete set. (VATABLE ITEM)	Nos	1				
14	Installation, Testing and Commissioning Charge of 2 kwp solar backup system with cable tie, nuts, bolts, clamps as per attached specification or as directed by engineer. (VATABLE ITEM)	Pc	1				

B) Supply And Delivery Of 20 Wp Solar Home System

S.N	Description	Unit	Quantity	Rate		Amount (NRS)	Remarks
				In Figure	In Words		

1	Supply and delivery of Solar Pv module 20 watt (NON VATABLE ITEM)	No.	33			-	
2	Supply and delivery of Charge controller 5 Ampere (NON VATABLE ITEM)	Pcs	33			-	
3	Supply and delivery of Solar Battery 23 Ah (VATABLE ITEM)	Pcs	33			-	
4	Aluminium/GI solar PV frame along with nut bolt (VATABLE ITEM)	Set	33			-	
5	Multristrand cable 0.5 mm2 (VATABLE ITEM) (40 m in each Piece)	Meter	1320			-	
6	cable shoe, 1.5 mm (VATABLE ITEM)	pcs	66			-	
7	LED bulb 4 watt (VATABLE ITEM)	Nos	99			-	
8	switches (VATABLE ITEM)	Nos	99			-	
9	Bulb holder (VATABLE ITEM)	Nos	99			-	

C) Supply, Delivery And Installation Of Solar Battery

S.N	Description	Unit	Quantity	Rate		Amount (NRs)	Remark
				In Figure	In Amount		
1	Supply and delivery of 150 Ah Lead Acid Battery @10C 12VDC as per attached specification. (VATABLE ITEM)	Pc	4			-	
2	Installation Charge (VATABLE ITEM)	NS	1			-	
Total Amount Excluding VAT							
VAT 13% On VATABLE ITEM As Mentioned Above							
Total Amount Including VAT							

Name Of Company :-	
Name Of Company's Representative:-	
Signature Of Bidder:-	
Company Stamp	