# THE SHAHABAD COOPERATIVE SUGAR MILLS LTD., SHAHABAD (MARKANDA) DETAILED NOTICE INVITING TENDER

E-Tender is invited for below mentioned items in single stage two cover system available online at <a href="https://www.etenders.hry.nic.in">www.etenders.hry.nic.in</a> i.e. Request for Pre-Qualification/Technical Bid (online Bid under PQQ/ Technical Envelope) and Request for Financial Bid (comprising of price bid Proposal under online available BOQ Commercial Envelope):-

Sr. No.	Name of Items	EMD to be deposited	E services fees	Start Date & Time of Bid Preparation & Submission	Expiry Date & Time of Bid Preparation & Submission
1.	SUPPLY, INSTALLATION AND COMMISSIONING OF ROOFTOP SOLAR POWER PLANTS OF 30 KWP IN MILL PREMISES WITH BATTERY BANK	Nil	1280/-	09.10.2021 at 11.00 AM	13.10.2021 UPTO 06.00 PM

Under this process, the Pre-qualification/ Technical online bid Application as well as online Price Bid are invited at single stage under two covers i.e. PQQ/Technical & Commercial Envelope. Eligibility and qualification of the Applicant will be first examined based on the details submitted online under first cover (PQQ or Technical) with respect to eligibility and qualification criteria prescribed in this Tender document. The Price Bid under the second cover shall be opened for only those Applicants whose PQQ/ Technical Applications are responsive to eligibility and qualifications requirements as per Tender document.

- 1. The payment for Tender Document Fee and e-Service Fee shall be made by eligible bidders online directly through Debit Cards & Internet Banking Accounts and the payment for EMD can be made online directly through RTGS/NEFT or OTC Please refer to 'Online Payment Guideline' available at <a href="https://www.etenders.hry.nic.in">www.etenders.hry.nic.in</a> and also mentioned under the Tender Document.
- 2. Intending bidders will be mandatorily required to online sign-up (create user account) on the website https://haryanaeprocurement.gov.in to be eligible to participate in the e-Tender. He/She will be required to make online payment of (Mention EMD Amount) towards EMD fee in due course of time. The intended bidder fails to pay EMD fee under the stipulated time frame shall not be allow to submit his / her bids for the respective event / Tenders.

The interested bidders must remit the funds at least T+1 working day (Transaction day + One working Day) in advance i.e. on or before (13.10.2021 upto 06.00 PM.); and make payment via RTGS /NEFT or OTC to the beneficiary account number specified under the online generated challan. The intended bidder / Agency thereafter will be able to successfully verify their payment online, and submit their bids on or before the expiry date & time of the respective events/Tenders at www.etenders.hrv.nic.in

The interested bidders shall have to pay mandatorily e-Service fee (under document fee – Non refundable) of Rs.1280/(Rupee One Thousand two hundred eighty Only) online by using the service of secure electronic gateway. The secure electronic payments gateway is an online interface between bidders & online payment authorization networks.

The Payment for document fee/ e-Service fee can be made by eligible bidders online directly through Debit Cards & Internet Banking.

The Bidders can submit their tender documents (Online) as per the dates mentioned in the key dates:-

## **Key Dates**

Sr. No.	Department Stage	Bidder's Stage	Start date and time	Expiry date and time
1		Tender Document Download and Bid Preparation/Submission	09.10.2021 at 11.00 AM	13.10.2021 UPTO 06.00 PM
2	<b>Technical Bid Opening</b>		14.10.2021 AT 10.00 AM	
3	Financial Bid Opening		14.10.2021 AT 02.00 PM	
4	Negotiation		16.10.2021 A	T 11.00 AM

The bids shall be submitted online in two separate envelopes:

### **Envelope 1: Technical Bid**

The bidders shall upload the required eligibility & technical documents online in the Technical Bid in **PDF format** having following documents.

# <u>Information/documents to be uploaded by the tenderers in the Technical Bid where ever is applicable.</u>

- 1. Certificate from the proprietor/partner/firm authorizing firm's representative to sign/participate in opening and negotiation of the tender (signature duly attested).
- 2. Copy of Sales Tax/GST registration No.
- 3. Copy of PAN Card
- 4. Certificate regarding acceptance of all the Terms & Conditions as mentioned in the DNIT/Tender document.
- 5. Upload the information i.e. Firm/Company Name, Complete Address, Contact person, Mobile No. & e-mail ID.
- 6. Registration certificate from NFCSF (National Federation of Cooperative Sugar Factories Ltd.) or NCDC (National Cooperative Development Corporation) or Haryana State Sugar Federation.
- 7. If the Party is registered as standard / qualified supplier with NFCSF/NCDC or Haryana State Sugar Federation/HAREDA/MNRE for required make OR Original Manufacturer of the required make/Authorized Dealer, Copy of certificate is to be attached.
- In case of unregistered supplier/firm. It must submit proof of repeat orders of supply of same product/job to atleast 2 standard Sugar Mills/Any Coop. Sugar Mills of Haryana or any other heavy Industrial Organization where similar machinery/product are being used. (List as under) for 2 years during the last 5 years, supporting documents in support of the same is to be attached. Copy of repeat order is to be attached.

# $\underline{\textbf{List of standard Sugar Mills whose purchase orders copies are to be attached in technical envelope}$

- a) Saraswati Sugar Mills, Yamunanagar
- b) Upper Doab Sugar Mills, Shamli
- c) Tatawi Sugar Mills, Tatawi
- d) Group of Balrampur Chini Mills, Balrampur
- e) Birla Group Mills
- f) Chaddha Group Mills
- g) Rana Sugar Mills
- h) Dhampur Group Sugar Mills
- ) Triveni Group Mills
- j) Daurala Group Mills
- k) Mawana Sugar Mills
- l) Bajaj Group Mills
- m) Any Coop. Sugar Mills of Haryana
- n) Any other Heavy Industrial Organization where similar machinery/product are being used.
- 8. Bank details of the tenderer for e-payment:
- *a.* Bank A/c No.: \_\_\_\_\_
- **b.** Bank Name :
- c. Branch Name:
- d. IFSC Code:\_\_\_\_
- e. Other details:

In case of Non-uploading of the above (wherever is applicable) the technical bid shall be rejected. Envelope 2: Commercial Bid

The bidders shall quote the prices in price bid format under Commercial Bid/BOQ

# INSTRUCTIONS TO BIDDER ON ELECTRONIC TENDERING SYSTEM:

These conditions will over-rule the conditions stated in the tender documents, wherever relevant and applicable.

#### 1. Registration of bidders on Portal:-

All the bidders intending to participate in the tenders process online are required to get registered on the centralized on Portal **www.etenders.hry.nic.in**. Please visit the website for more details

#### 2. Obtaining a Digital Certificate:

- 2.1 The Bids submitted online should be encrypted and signed electronically with a Digital Certificate to establish the identity of the bidder bidding online. These Digital Certificates are issued by an Approved Certifying Authority, by the Controller of Certifying Authorities, Government of India.
- A Digital Certificate is issued upon receipt of mandatory identity (i.e. Applicant's PAN Card) and Address proofs and verification form duly attested by the Bank Manager / Post Master / Gazetted Officer. Only upon the receipt of the required documents, a Digital Certificate can be issued. For more details please visit the Portal www.etenders.hry.nic.in.
- 2.3 The bidders may obtain Class-II or III digital signature certificate from any Certifying Authority or Sub-certifying Authority authorized by the Controller of Certifying Authorities or may obtain information and application format and documents required for the issue of digital certificate from.
- **2.4** The bidder must ensure that he/she comply by the online available important guidelines at the portal **www.etenders.hry.nic.in**. for Digital Signature Certificate (DSC) including the e-Token carrying DSCs.
- 2.5 Bid for a particular tender must be submitted online using the digital certificate (Encryption & Signing), which is used to encrypt and sign the data during the stage of bid preparation. In case, during the process of a particular tender, the user loses his digital certificate (due to virus attack, hardware problem, operating system or any other problem) he will not be able to submit the bid online. Hence, the users are advised **to keep a backup of the certificate** and also keep the copies at safe place under proper security (for its use in case of emergencies).
- 2.6 In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no-objection certificate /power of attorney / lawful authorization to that User. The firm has to authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000. Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the firm in the department tenders as per Information Technology Act 2000. The digital signature of this authorized user will be binding on the firm.
- 2.7 In case of any change in the authorization, it shall be the responsibility of management / partners of the firm to inform the certifying authority about the change and to obtain the digital signatures of the new person / user on behalf of the firm /
- **2.8** The same procedure holds true for the authorized users in a private/Public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.

company. The procedure for application of a digital certificate however will remain the same for the new user.

# **3** Opening of an Electronic Payment Account:

For purchasing the tender documents online, bidders are required to pay the tender documents fees online using the electronic payments gateway service shall be integrated with the system very soon till then it will be submitted manually. For online payments guidelines, please refer to the Home page of the Portal: www.etenders.hry.nic.in.

# 4 Pre-requisites for online bidding:

In order to operate on the electronic tender management system, a user's machine is required to be set up. A help file on system setup/Pre-requisite can be obtained from Nextenders (India) Pvt. Ltd. or downloaded from the home page of the website **www.etenders.hry.nic.in.**. The link for downloading required java applet & DC setup are also available on the Home page of the e-tendering Portal.

# 5 Online Viewing of Detailed Notice Inviting Tenders:

The bidders can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the single portal on the Home Page at **www.etenders.hry.nic.in**.

# 6 Download of Tender Documents:

The tender documents can be downloaded free of cost from the portal www.etenders.hrv.nic.in.

# THE SHAHABAD COOPERATIVE SUGAR MILLS LTD., SHAHABAD (MARKANDA)

# **Technical Bid (To be uploaded)**

# SUPPLY, INSTALLATION AND COMMISSIONING OF ROOFTOP SOLAR POWER PLANTS OF 30 KWP IN MILL PREMISES WITH BATTERY BANK

## As per purchase policy of the State Govt. the negotiation if required will be held with L-1

S.No.	Description	Qty.
1	Supply, installation and commissioning of Rooftop Solar Power Plants of 30 KWp in Mill	
	premises with battery bank of suitable capacity/rating	
1.01	Supply, installation and commissioning of Rooftop Solar Power Plants of 30 KWp in Mill premises	02 nos.
	with battery bank of suitable capacity/rating including comprehensive maintenance for a period of	
	one year with supply of Distribution boards and required civil work.	

### Technical specifications of the Rooftop Solar Power plant shall be in accordance MNRE

The main components of the SPV plant are:

- PV Modules
- Civil work
- Module Mounting Structure
- Array Junction Boxes
- String Monitoring Boxes
- Earthing System
- Lightning & Surge Protection
- DC Cables.
- AC Cables.
- Battery bank of required rating

This list is of general nature and some of the components may not be required or may be combined as per the system finally designed.

#### 1. Typical Power Generation Scheme consists mainly of the following:

- Solar PV array which produces DC electricity when solar ray's incident on it.
- **Power Conditioning Units (PCU) or Inverters** which convert DC (Direct Current) electricity into AC (Alternating Current) electricity will be of automatic type with three mode backups (solar, invertor & main supply)

# 2. Typical System Components

### **PV MODULES:**

- i. The PV modules must conform to the latest edition of any of the following IEC /equivalent BIS Standards for PV module design qualification and type approval: Crystalline Silicon Terrestrial PV Modules IEC 61215 / IS14286, Thin Film Terrestrial PV Modules IEC61646 / Equivalent IS (Under Dev.), Concentrator PV Modules & Assemblies IEC 62108.
- ii. In addition, the modules must conform to IEC61730 Part 1-requirements for construction & Part 2 requirements for testing, for safety qualification or Equivalent IS (Under Dev.)
- iii. PV modules to be used in a highly corrosive atmosphere (coastal areas, etc.) must qualify Salt Mist Corrosion Testing as per IEC 61701/ IS 61701. (Make- approved by HAREDA/ MNRE)

#### 3. General description of Inverters:

The DC power produced by Solar Modules is fed to inverter for conversion into AC. In a grid interactive system AC power has to be fed at 415V 3Ph 50 Hz. The output of the inverter must synchronize automatically its AC output to the exact AC voltage and frequency of the grid. The design of the inverter should be made to meet the Indian voltage and frequency conditions (the frequency band should be ±5%). The inverter continuously monitors the condition of the grid and in event of grid failure; the inverter automatically isolates the Solar Power System. The solar system is resynchronized with the grid after the restoration of grid. The inverter shall be designed so as to operate the PV system near its Maximum Power Point available, the operating point where the combined values of the current and voltage of the solar modules result in a maximum power output. The inverter should be a true sine wave inverter for a grid interactive PV system. The degree of protection of the indoor inverter panel shall be at least IP-31 and that of outdoor at least IP-55. (Make- approved by HAREDA/ MNRE)

#### 3. CABLES, SWITCHES, CIRCUIT BREAKERS, CONNECTORS AND JUNCTION BOXES

- A. Cables: The cables deployed will be robust and resist high mechanical load and tension. Cable should have High temperature resistance and weather proofing characteristics to ensure long life. The connectors should have high current carrying capacity. All the cables and connectors shall have IEC, UL, TUV or equivalent approval and shall be designed to have excellent UV Resistance. The cables should have Halogen free and flame-retardant characteristic. All the cables shall be suitably designed and sized to carry DC and AC currents with the low voltage drops. The cables supplied shall have a proven track record for the use in PV Solar Plants. All cables shall be supplied conforming to IEC 60227/ IS 694 & IEC60502/ IS 1554 Voltage rating: 1,100V AC, 1,500V DC. (Make-Polycab/Havells/L&T/ Make- approved by HAREDA/ MNRE)
- B. **Switches, Circuit Breakers, Connectors**: All Switches, Circuit Breakers, Connectors shall be supplied conforming IEC 60947 part I, II, III / IS 60947 Part I, II,III/ EN 50521. (Make-Legrand/Havells)
- C. **Junction Boxes**: All Junction Boxes shall be supplied conforming to IP 54(for outdoor)/ IP 21(for indoor) as per IEC 529

#### 5. EARTHING:

- i. The PV module structure components shall be electrically interconnected and shall be grounded.
- ii. Earthing shall be done in accordance with IS 3043-1986, provided that earthing conductors shall have a minimum size of 6.0 mm<sup>2</sup> copper, 10 mm<sup>2</sup> aluminum or 70 mm<sup>2</sup> hot dip galvanized steel. Unprotected aluminum or copper-clad aluminum conductors shall not be used for final underground connections to earth electrodes.
- ii. A minimum of two separate dedicated and interconnected earth electrodes must be used for the earthing of the solar PV system support structure with a total earth resistance not exceeding 5 ohms.
- iv. The earth electrodes shall have a precast concrete enclosure with a removable lid for inspection and maintenance. The entire earthing system shall comprise non-corrosive components.

## 6. **SURGE PROTECTION:**

- i. Surge protection shall be provided on the DC side and the AC side of the solar system.
- ii. The DC surge protection devices (SPDs) shall be installed in the DC distribution box adjacent to the solar inverter.
- iii. The AC SPDs shall be installed in the AC distribution box adjacent to the solar inverter.
- iv. The SPDs earthing terminal shall be connected to earth through the above-mentioned dedicated earthing system. The SPDs shall be of type 2 as per IEC 60364-5-53.

#### 7. POWER QUALITY REQUIREMENTS:

The Total Harmonic distortion and ripple content on AC and DC side must not exceed 3 % the provision to measure harmonics should be inbuilt feature of the inverter. Voltage unbalance at the inverter output will be limited to one percent (1 %) The power factor maintained by the inverter should be close to unity. The nominal steady state electrical characteristics of the system is 3- phase alternating current at 50 Hz.

### 8. WARRANTY:

The mechanical structures, electrical works including power conditioners/inverters/charge controllers/maximum power point tracker units/distribution boards/switch gear/storage batteries, etc. and over all workmanship of the SPV power plants/ systems must be warranted against any manufacturing/ design/ installation defects for a minimum period of 5 years. PV modules used in solar power plants /systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 12 years.

# Authorized Test Centers:

The PV modules must be tested and approved by one of the IEC authorized test centers. In addition, a PV module qualification test certificate as per IEC standard,

# **Terms & Conditions:**

- 1. Payment :- 90% after complete supply, installation & commissioning of Solar Power Plant & balance 10% after one month.

  Note :- Marginal relaxation in the payment term can be considered at the time of negotiation.
- 2. F.O.R. :- Sugar Mill.
- 3. Packing & forwarding :- Nil
- 4. Delivery period: ........... weeks. Late delivery Penalty @ 1% per week will be imposed on delayed period, subject to maximum 5% on basic value of short supply.
- 5. SGST/CGST/UGST/IGST:- Extra as applicable as per norms (Our GST No. 06AAAAT0381N1ZC)
- 6. TDS on supply is to be deducted as per GST Rule, if applicable
- 7. The above said work will be carried out as per the directions of HOD.
- 8. If at all L-1 party regret to supply the ordered material, then Mills Board shall have the right to award the order to second lowest party on the finalized rates in the interest of the Mills.
- 9. Board/Management of this Mills shall have the right to black-list the defaulter party from this Mills.

- 10. Board/Management of this Mills shall have the right to negotiate with other participant also if quoted rates of L-1, L-2 & L-3 party are not seems upto the marks in the interest of the Mills.
- Mill Management may ask the party to submit corporate guarantee along with the post dated cheque as a performance fulfillment of the material supplied.
- The supplier will be held responsible for any late irregular and non-supply of the material(s) to the Mills. In that event the Mill will arrange the material from the market at the risk and cost of the supplier and the supplier will be held responsible for all the losses suffered by the Mills on this account.
- 13. The quantity of material is tentative, it can be increased or decreased upto any extent on the sole discretion of the management at the time of placing the order.
- Rates are to be quoted on the basis of above said terms & conditions.
- 15. The final rates will be valid for whole crushing season, 2021-22.
- 16. Successful bidder will have to submit the certificate on firm letter pad/Invoice bearing the below mentioned
  - "Certified that the rates quoted in this tender are the lowest possible. And if it comes out that perchance, we had quoted/were to quote lower basic rates in any Sugar Mill/Organization during the currency of order/contract, we shall intimate the same and refund the difference of value immediately within fifteen days. If we fail to do so and your mills come to know of it through own/other sources, then your mills shall be entitled to claim the amount of double the difference of the cost from us".
- The undersigned reserves the right to accept or reject any or all the tenders without assigning any reason.

The last date for the submission of E-Tender Technical & Commercial bids online is 13.10.2021 upto 06.00 PM., opening of Technical Bids on 14.10.2021 at 10.00 AM and Commercial bid of eligible tenderers will be opened on same day at 02.00 PM. The negotiation will be held on 16.10.2021 at 11.00 AM. with the successful bidders in the office of undersigned.

**Managing Director.** 

Signature of the party with seal