NO.CSB/NSSO/CSP/(70)/HSR//2017-18/TS

To:

Sir,

Sub: Inviting sealed quotations for Procurement of 125 KVA Diesel Generator Set at Cold Storage Plant, CSGRC Campus, Hosur -reg.

The National Silkworm Seed Organization, Central Silk Board, Bangalore invites sealed Tenders (two bid system) for Procurement of one No. 125 KVA Diesel Generator Set at Cold Storage Plant, CSGRC Campus, Hosur-635109 (Tamil Nadu). For detailed information with regard to Specifications Terms & Conditions, you may visit CSB website. [www.csb.gov.in or www.eprocuare.gov.in]

TECHNICAL SPECIFICATIONS OF 125 KVA DG SET

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Rated Capacity</td>
<td>125 KVA</td>
</tr>
<tr>
<td>No. Of Phases</td>
<td>3 phase</td>
</tr>
<tr>
<td>Output Voltage and Frequency</td>
<td>415 V, 50 Hz</td>
</tr>
<tr>
<td>Power factor</td>
<td>0.8</td>
</tr>
<tr>
<td>Current</td>
<td>174 Amps</td>
</tr>
<tr>
<td>RPM</td>
<td>1500</td>
</tr>
<tr>
<td><strong>Engine Specification</strong></td>
<td></td>
</tr>
<tr>
<td>Type of Engine cooling</td>
<td>Liquid cooled</td>
</tr>
<tr>
<td>Number of Cylinders</td>
<td>6</td>
</tr>
<tr>
<td>Number of Strokes</td>
<td>4</td>
</tr>
<tr>
<td>Engine power/Capacity</td>
<td>5900 cc</td>
</tr>
<tr>
<td>Type of Governor</td>
<td>Mechanical</td>
</tr>
<tr>
<td>Class of governor</td>
<td>A1</td>
</tr>
<tr>
<td>Rated RPM of Engine</td>
<td>1500 RPM</td>
</tr>
<tr>
<td>Starter</td>
<td>Electrical starter motor with soft start engagement feature</td>
</tr>
<tr>
<td>Starting system</td>
<td>12 Volt DC Electrical</td>
</tr>
<tr>
<td>Battery capacity</td>
<td>100 Ah / Equivalent</td>
</tr>
<tr>
<td>No of Batteries</td>
<td>1 No</td>
</tr>
<tr>
<td>Battery type</td>
<td>Low maintenance free for high cranking performance</td>
</tr>
<tr>
<td>Fuel</td>
<td>Diesel</td>
</tr>
<tr>
<td>Fuel tank</td>
<td>Inbuilt</td>
</tr>
<tr>
<td>Silencer</td>
<td>Hospital grade silencer with rain cap suitability</td>
</tr>
</tbody>
</table>
Alternator Specification

<table>
<thead>
<tr>
<th>Alternator model</th>
<th>UCI274V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating of Alternator</td>
<td>125 KVA</td>
</tr>
<tr>
<td>Power factor</td>
<td>0.8</td>
</tr>
<tr>
<td>Type of alternator</td>
<td>Brushless, screen protected, revolving field</td>
</tr>
<tr>
<td>Efficiency at rated power factor at 75% of Full load</td>
<td>90.25</td>
</tr>
<tr>
<td>Voltage Regulation Grade</td>
<td>VG-2</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP-23</td>
</tr>
<tr>
<td>Class of Insulation</td>
<td>H</td>
</tr>
</tbody>
</table>

Control Panel (AMF)

Control panel shall consist of following parts:

- Controller
- Aluminium bus bars with suitable capacity with incoming/outgoing terminals
- Indicating lamps for 'Load ON' and 'Set running'
- MCCB of suitable rating with overload and short circuit protections
- Voltmeter, ammeter, frequency meter, power factor meter, Battery charger, Indicators, switches and cutouts, contactor, circuit breaker.
- The Automatic Mains Failure (AMF) control panel shall be able to start up the DG set and transfer the load on to the DG set on Mains failure without requiring any human intervention. Similarly on restoration of Mains supply it shall be able to transfer load to Main supply and switch off the DG set automatically.
- The control panel should have protection against under voltage, over voltage, under frequency, over frequency, Low battery voltage, over current, Earth fault, short circuit, phase sequence change etc
- Manual Bypass change over switch to be provided for direct transfer of load from EB and DG set in case of failure in AMF.
- The control panel should have separate change over switch for transferring loads from new 125 KVA DG set and existing 100 KVA DG set (standby) to mains supply.

Controller

The controller shall be a microprocessor based generator set monitoring and controlling system and it includes

- LED backlit LCD display with feel soft-switches and generator set status LED lamps.
- Remote start-stop.
- Engine metering : Oil pressure, Engine temperature, starting battery voltage, Engine running hours
- AC Alternator metering: L-L voltage, L-N voltage, Current (phase and total), KVA (phase and total), Frequency.
- Engine protection: Low lube oil pressure, High/Low coolant temperature, Battery over/under/weak volts, Fail to crank/start, sensor failure, Cranking lockout, Low fuel level.
- Data Logging: Engine hours, Control hours and up to 5 recent fault codes.
- 12 volt Dc operation
- Sleep mode, Modbus interface, In power compatible
- Certifications meets the requirements of relevant ISO, EN, Mil Std. and CE standards
Acoustic Enclosure

<table>
<thead>
<tr>
<th>Acoustic Enclosure type</th>
<th>Pre-treated and powder coated acoustic enclosure of CRCA sheet and should be approved by CPCB.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCA sheet thickness</td>
<td>1.6 mm</td>
</tr>
<tr>
<td>Thickness of foam</td>
<td>40 mm</td>
</tr>
<tr>
<td>Density of foam for sound insulation</td>
<td>28</td>
</tr>
<tr>
<td>Noise level at 1 meter</td>
<td>75 db</td>
</tr>
<tr>
<td>IP rating</td>
<td>IP-53</td>
</tr>
</tbody>
</table>

Onsite installation specifications

- The DG set shall meet the requirements of Environmental (protection) Rules 1986 as laid down by Ministry of Environment & Forests and as per their latest Gazette notification in respect of noise and emission Norms. Latest amendments shall be applicable as and when amended by Ministry of Environment & Forests.

- The firm shall confirm the availability of test report from Central government/NABL/ILAC Accredited laboratory to prove conformity to the specification for each rating for Engine and Alternator and provide the test report number/Date/Name and Address of Laboratory.

- Anti-vibration Mountings for complete DG set in case of flexible coupling and for pressure charged Engine in case of direct coupling shall be supplied.

- The firm shall lay the foundation for DG set and it shall be of PCC type with the ratio of 4:2:1. The foundation shall be 300 mm more than the respective length and breadth of the DG set. The Height of the foundation shall be 400 mm i.e. 200 mm below and 200 mm above the ground level.

- The firm shall do the laying and termination of power supply cables and they shall provide ISI Marked PVC Outer sheathed (FR) of Type ST-2 Cable armoured with Copper conductor having insulation of compound type \( \text{C} \), suitable for rated voltage at 1100 volts grade and confirming to IS: 1554 (part-1)/1988(Reaffirmed 2005) cable. Higher core cables shall be used as per standards. Total length of cable shall be within 60 meters (as per site requirements).

- Building suitable Earthing station and necessary connections shall be done by the firm. The total number of earth pits shall be 4 i.e. 2 for neutral and 2 for body earthing.

- The firm shall carry out unloading and placement of DG set on foundation.

- The first fill of lube oil and all filters shall be provided by the firm. The firm shall also provide 50 litres of Diesel for DG set.

- The warranty for the 125 KVA DG set including AMF panel shall be a minimum of two years from the date of commissioning and testing of the DG set.

- The firm shall do the installation, commissioning and testing of the DG set and the consumables provided by the firm cover the trial run of DG set as well as the firm shall conduct the trial run of the DG set with the available electrical load at site. The trial run shall be for one hour and the available electric load shall be less than or equal to the rated capacity of the DG set.
The firm should send detailed specification of DG set and panel with all relevant drawings, wirings and other information.

The firm should take all necessary approvals for pre installation, installation, drawings and usage from CEIG and concerned department.

The firm should provide access to inspect the DG set / Panel at their location before dispatch to our location.

**Qualification Criteria:**

- The bidder must be a manufacturer or Authorized dealer/agent of the manufacturer and copy of the authorization certificate has to be attached along with the technical bid.
- The bidders who submit the bid should have at least 5 years experience in the supply, installation and commissioning of Diesel Generator set of higher rated capacity.
- The bidder shall enclose documents showing their financial capabilities such as income tax returns, annual turnover and work orders executed during previous years along with the technical bid.
- The bidder has the financial, technical and service capability necessary to perform the contract.
- The firms shall enclose necessary proof i.e., work order copies and copy of Credential Certificates from the concerned customers/departments/company for having undertaken similar type of works or much bigger magnitude along with the technical bid.
- The firms should furnish the information on past supplies/services and satisfactory performance along with the technical bid.
- The firms which participate in the tender should have supplied, installed & commissioned such type of Diesel Generator set at least in one location and such facility should be in successful working condition at least for 24 months as on the date of submission of tender.
- The time duration for supply, installation, commissioning, testing and handing over of 125 KVA DG set from the date of issuing work order shall be 90 days.

**TERMS & CONDITIONS**

The Sealed Quotations should be in two bid system. The sealed quotation should be super-scribed as “QUOTATION FOR PROCUREMENT OF 125 KVA DIESEL GENERATOR SET”. The quotation should be sent in two parts i.e., Technical Bid and Financial Bid separately in sealed cover duly super scribed and both these covers put in a bigger cover which should also be sealed and super scribed.
Technical Bid:

- **Technical Bid** should be submitted in the following format (which should be signed by the authorised person with name & Designation with company seal) with all documentary proof.

  a) Tender's reference No _______________ Date _______________

  b) Tender for the supply of ______________________________

  c) Name of the Tenderer ________________________________

  d) Address ________________________________

      a) Telephone No........................  c) Fax No..............................

      b) Mobile No.............................  d) e-mail..........................

  e) EMD: Demand Draft No..................... DT............. For Rs......................

     (Earnest Money Deposit (EMD) in the form of A/c payee Demand Draft /Bankers cheque
     must be attached with the technical bid EARNEST MONEY IN THE FORM OF CHEQUE
     WILL NOT BE ACCEPTED).

  f) The bidder should be ready to supply the items as per the specifications.

  g) The bidder may provide required documents to establish veracity.

  **h) The bidders are advised to accept and sign each page of the tender document with stamp/seal.**

  i) Status of the applicant

     (Whether original manufacturer authorized
     Distributor /authorised dealer. As per tender
     Notice Certificate must be submitted from
     appropriate authority.)

  j) Manufacturing licence no. & Date

  k) GST registration No. & Date

  l) Copy of PAN & GST registration

  m) Copy of Income Tax returns for the last 3 years

  m) Declaration that the Firm / tenderer is not

     Blacklisted by any Department of Central / State Govt. /PSUs or any Public Institution

     Owned by Central Govt.

  "Signature of the Tenderer

  With Seal"

- The Technical bid which does not fulfil the above conditions will be treated technically non-responsive and summarily be rejected.
Financial Bid

- Financial Bid should be submitted as per the enclosed Price schedule format and contain the information such as Unit price, GST, Insurance Package, Supply, Installation & Commissioning, Transportation charges etc. and the price on each item should be quoted separately.

- Rates quoted should be for Destination i.e. Cold Storage Plant, CSGRC Campus, Thally Road, Hosur (TN) – 635109

Bid Security (EMD)

- The Bidder shall furnish, as part of the bid, bid security (EMD) for an amount of Rupees 20,000/- along with the technical bid.

- All the bids should be accompanied with bid security amount in the form of Demand Draft drawn in favour of the Director, National Silkworm Seed Organization payable at Bangalore; No exemption from submission of bid security, on any grounds other than MSME (necessary proof should be submitted), will be allowed;

- Any bid not accompanied with bid security will be rejected, as non-responsive;

Opening of Bids

- The Purchaser will open the tender box and the bids, in the presence of Bidders’ representatives who choose to attend the bid opening at 3.30 p.m. on 30.11.2018 at the office of The Director, NSSO, IV Floor, CSB complex, Madivala Bangalore – 560 068. The Bidders’ representatives who are present shall sign a register evidencing their attendance.

- The technical bids will be opened by the purchaser at the first instance and evaluated. At the second stage, financial bids of only the technically acceptable offers shall be opened for further evaluation and ranking before awarding the contract.

Performance Security

- Within 10 days of the receipt of notification of award from the Purchaser, the successful Bidder shall furnish the performance Security equivalent to 5% of the total Contract value, in the form of Bank Guarantee. The bank guarantee issued by any Nationalized or Foreign bank located in India shall be accepted by the Purchaser and shall be valid till three months after the expiry of the warranty period;

- The Bank Guarantee towards the performance security shall be drawn in favour of “Director, National Silkworm Seed Organization”, payable at Bangalore;

- The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier’s failure to complete his obligations under the Contract;
➢ The Bid Security will be discharged within 15 days, after receipt of the Performance Security;

➢ Failure of the successful Bidder to furnish Performance Security within the prescribed time shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event; the Purchaser may make the award to the next lowest evaluated bidder or call for new bids;

➢ The Performance security will be discharged by the Purchaser and returned to the Supplier after completion of all contractual obligations of the supplier including warranty obligations.

**Other terms & conditions**

1. The supplier shall provide Warranty/Guarantee valid for a minimum period of 24 months from the date of Commissioning of the DG set. Any defects noticed in the equipment which is unintentional shall be set right by the supplier free of cost for good performance of the equipment.

2. Liquidated damages for delay & non supply a sum equivalent to 0.5% of the delivered price of the delayed Goods or un-performed services for each week of delay until actual delivery or performance up to a maximum deduction of 10% of the delayed Goods or Services from the Contract price. Once the maximum is reached the Purchaser may consider termination of the Contract.

3. The rate quoted should be valid for 180 days from the date of opening of Technical bid.

4. Quotations without EMD will be rejected summarily

5. EMD of the un-successful bidders will be returned after finalization of successful bidder and EMD of successful bidder will be retained till completion of supply and it will be forfeited under the following circumstances.

   a. Non-completion of supply of the ordered items within the stipulated time and

   b. Non-fulfilment of specification.

6. Supply of the sub-standard materials will be rejected.

7. **DISPUTES:** The Purchaser and the Supplier shall make every effort to resolve all the disputes amicably by direct formal negotiation any disagreement or dispute arising between them under or in connection with the Contract. If even after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a contract dispute either party may require that the dispute be referred for resolution, the same can be referred to a common arbitrator acceptable to both the parties.

8. The Director, NSSO reserves the right to accept or reject any or all quotations, without assigning any reason, whatsoever and in case of any dispute, the decision of the Director, NSSO will be final and binding on them. However, the reasons for rejecting a tender or non-issuing a tender document to a prospective bidder will be disclosed when enquires are made to this Organization.
9. The last date for submission of the sealed quotation addressed to the Director, National Silkworm Seed Organization, Central Silk Board, IV Floor, CSB Complex, B.T.M Layout, Madivala, Bangalore -560 068 duly super-scribed on the envelopes “Quotation for Procurement one No. of 125 KVA D.G.Set” is 30.11.2018. The Technical Bid will be opened at 3.30 P.M. on the same day. The quotations may be dropped in the “TENDER BOX” kept in Technical Section, IV Floor, CSB Complex, B.T.M Layout, Madivala, Bangalore OR may be sent by post to the address given above.

10. **Payment terms**: FOR/FOT delivery at site i.e. Cold Storage Plant, CSGRC Campus, Thally Road, Hosur (TN) – 635109, 30 (thirty) per cent on receipt and acceptance of goods by the consignee at destination and on production of all required documents by the supplier and balance 70 (seventy) per cent on successful installation and commissioning and acceptance by the consignee.

11. Quotations received after the due date / time will not be entertained.

12. **Applicable Law**: The Contract shall be interpreted in accordance with the Indian Law with jurisdiction at Bangalore.

Yours faithfully,

DIRECTOR

Encl: As above.
## PRICE SCHEDULE

<table>
<thead>
<tr>
<th>#</th>
<th>Item Description</th>
<th>Qty.</th>
<th>Unit/rate (Per No.) (In Rs.)</th>
<th>GST</th>
<th>Total Amount (In Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Supply of 125 KVA DG set as per technical specification given in tender document</td>
<td>1 Set</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Installation, testing and commissioning of 125 KVA DG set as per technical specification given in tender document</td>
<td>1 Set</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NET PAYABLE = Sl. No. (1) + (2)**

**TOTAL BID PRICE IN RUPEES ANDWORDS:**

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........................................................................................................................................

**Note:**
In case of discrepancy between
Unit price and total price, the unit price
Shall prevail

**SIGNATURE OF THE BIDDER:**

BUISINESS ADDRESS :