छत्रपति शाहू जी महाराज विश्वविद्यालय, कानपुर


अल्पकालीन निविदा सूचना

विश्वविद्यालय में विधुत सर्विस, 40KVA, 415V साइलेंट डीजल जनरेटर सेट एवं स्प्रिट एंड सी की आपूर्ति एवं सस्तानाप दार्शन कार्य के लिए अल्ग-अलग निविदा सूचना समस्त फर्माह से दिनांक: 13.02.2013 अपराह्न 2:00 बजे तक मुहर्बन्द निविदा सहायक कुलसचिव (प्रशासन) के कक्ष में आमंत्रित की जाती है। निविदा प्राप्त एवं विस्तृत प्रस्तुति विश्वविद्यालय की वेबसाइट:WWW.Kanpuruniversity.Org पर उपलब्ध है।

(सैयद बनीर हुसैन)
कुलसचिव
SHORT TERM TENDER NOTICE

Sealed tenders are invited for “Supplying and installation of 40KVA 415 Volt Silent Diesel Generating Set in Cancer Research Lab IBSBT at CSJM University Kanpur” up to 02:00 P.M of 13.02.2013. Tender forms along with terms and conditions can be obtained from cash counter of university for Rs. 250/- or should be downloaded from university website: www.kanpuruniversity.org. Downloaded forms should be submitted with a Demand draft of Rs. 250/- in favour of “Finance Officer, C.S.J.M University, Kanpur” payable at Kanpur. Tenders will be opened on 13.02.2013 at 03:00 P.M in presence / absence of tenderers or their representatives.

Registrar
C.S.J.M University, Kanpur
SPECIAL TERMS & CONDITIONS

1. Tenders should qualify following criteria:-
   (List of documents (self attested Xerox copy) to be submitted)
   (a) ‘A’ class Government electrical license.
   (b) Service tax number of the firm.
   (c) Tin number of the firm.
   (d) PAN card number of the owner/proprietor.
   (e) Authorized dealer/ supplier of a authorized dealer of KIRLOSKER, CUMMINS, GREAVES.

2. Filled in Tender form should be accompanied with the earnest money Demand Draft/ FDR of Rs. 15000/- (Rs. Fifteen thousand only) drawn in Favor of "Finance Officer, C.S.I.M. University, Kanpur" payable at Kanpur.

3. Dully filled tenders along with all documents in a sealed cover super scribed "Tender for Supplying and installation of 40KVA 415 Volt Silent Diesel Generating Set in Cancer Research Lab IBSBT at CSJM University Kanpur " shall be accepted in the office of Assistant Registrar (Adm.) CSJM University Kanpur till 2.00 pm dated ...13-02-2013...

4. The rates quoted should be inclusive of all taxes. University will not pay any taxes separately. The tax as per norms of U.P. State Government / Government of India shall be deducted from the bills of the contractors at the prescribed rates.

5. Work and site can be seen in the university campus on any working day.

6. The purchaser does not pledge to accept the lowest or any other tender and reserves the right to accept or reject the whole or any portion of any tender as he may think fit without assigning any reason for non- acceptance or selection or reject all tenders without assigning reason thereof.

7. Subletting the work is strictly prohibited and also the operating staff shall maintain discipline and works ethics.

C.S.I.M University, Kanpur
8. The contractor shall have to give in writing an undertaking to the effect that the wages to mechanics & helper will be paid as per U.P. Govt. / Government of India. Notification approved by labor commissioner Ministry of labor from time to time and as per the norms failing which the contractor him self will be responsible.

9. The rate should be quoted in figure& words also.

10. Conditional tenders shall not be accepted.

11. Work shall be completed within stipulated period of time and in accordance with the attached technical specification.

12. Payment will be made after satisfactory job work.

13. Any referral dispute shall be referred to the Vice Chancellor whose decision will be final.

14. The tender document once submitted will not be returned back.

15. The tenders should clearly specify as to what type of after sales services guarantee/ warranty will be provided.
**Bill of Quantity**

**Name of work**: Supplying / installation of 40 KVA, 415 Volts 40 KVA silent diesel generating set in Cancer Research Lab at IBSBT of CSJM University, Kanpur.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
</table>
| 1    | Supply of 40 KVA, 415 Volts Silent DG Set (make- Cummins, kriloskar, Grivas) with following items complete in all respect:  
  a) Fuel tank.  
  b) Battery and leads.  
  c) Standard Control Panel.  
  d) Residual Silencer  
  e) First fill of lube oil  
  f) AVM Pads  
  g) Acoustic Enclosure. | 01       | No.  |      |        |
| 2    | Providing and fixing of auto-main failure system suitable for 40 KVA 3 phase DG set control panel etc. complete as required. | 01       | Job  |      |        |
| 3    | Earthing with GI earth plate 600x600x6mm thick including accessories and providing masonry enclosure with cover plate having arrangement and watering pipe etc. (with charcoal or coke and salt) complete as required. | 02       | Job  |      |        |
| 4    | DG set loading and unloading Charges                                         | 01       | Job  |      |        |
| 5    | DG set installation commissioning and testing etc. complete in all respect as directed at site by engineer- in- charge. | 01       | Job  |      |        |
| 6    | Construction of RCC plinth of 3000X1500X600mm and fixing of edge guard (35X35X6 mm iron angle fram) for RCC plinth of 3000X1500X400 mm for 40 KVA DG set. | 01       | Job  |      |        |
| 7    | Providing and laying earth connection with 25X6 mm GI strip in 40mm dia. GI pipe from earthing electrodes as required. | 30       | Mtr. |      |        |

**Total Rs.**

(Total in words)
ANNEXURE –1

TECHNICAL SPECIFICATION FOR 40 KVA SILENT DG SET

DIESEL ENGINE: Diesel engine rated at 1500 RPM, water cooled, four stroke, FOUR-cylinder, turbocharged, electric start model conforming to company make with capacity of 10% over loading for one hour in twelve hours duration having following accessories as scope of supply:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>DG Set Rating (KVA)</th>
<th>Engine Model</th>
<th>Engine H.P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40</td>
<td>according to company</td>
<td>58</td>
</tr>
</tbody>
</table>

AIR INTAKE SYSTEM
- Air intake manifold.
- Dry type air cleaner.

EXHAUST SYSTEM
- Turbocharger.
- SS Flexible bellow.
- Companion flanges for silencer & bellow.
- Exhaust silencer.

COOLANT SYSTEM
- Engine mounted centrifugal water pump.
- Radiator.
- Coolant additive concentrate.

LUBRICATING SYSTEM
- Oil pan.
- Engine mounted lub oil pump.
- Lube oil filter.

FUEL SYSTEM
- MICO fuel pump with Mechanical Governor.
- 12V DC solenoid coil.
- Replaceable fuel filter

STARTING SYSTEM
- 12V DC electric starter.
- 12V DC battery charging alternator.

SAFETY CONTROLS
- Low lub oil pressure trip.
- High water temperature trip.

Registrar
C.S.I.M University, Kanpur
POWERSTART CONTROL MICROPROCESSOR BASED

The Power Start control is a microprocessor based generator set monitoring and control system mounted in the Genset control panel. The control provides a simple operator interface to the generator set, manual and remote start/stop control, shut down fault indication, and an LCD display. The integration of all control functions into a single control provides enhanced reliability and performance compared to conventional generator set control systems.

**LED including lamps** - The control includes LED lamp indication for the following functions
- Genset Running
- Remote Start
- Shutdown
- Warning
- Manual, Auto and Stop

**Data Logs** - Includes Engine run time and controller on time.

**Alternator Data**
- Voltage (single or three phase line-to-line and line-to-neutral)
  - Current (single or three phase)
  - KVA (three phase and total)
  - Frequency

**Engine Data**
- Starting Battery Voltage
- Engine Running Hours
- Engine Temperature
- Engine Oil Pressure

**Functions: Control/Protection**

<table>
<thead>
<tr>
<th>Control</th>
<th>Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Start Mode – Accepts a ground signal from remote devices to automatically start the generator set. The control can incorporate a time delay start and stop.</td>
<td>Low lube oil pressure warning/shutdown</td>
</tr>
<tr>
<td></td>
<td>High engine temperature warning/shutdown</td>
</tr>
<tr>
<td></td>
<td>Low coolant temperature warning</td>
</tr>
<tr>
<td></td>
<td>Sensor failure indication</td>
</tr>
<tr>
<td>Engine Starting – The control supports automatic engine starting. The start disconnect is achieved by battery charging alternator feedback or main alternator output frequency.</td>
<td>Low and high battery voltage warning</td>
</tr>
<tr>
<td></td>
<td>Weak Battery Warning</td>
</tr>
<tr>
<td></td>
<td>Fail to start shutdown</td>
</tr>
<tr>
<td></td>
<td>Cranking lockout</td>
</tr>
<tr>
<td>Cycle cranking - Configurable for the number of starting cycles (1 to 7) and duration of crank and rest periods. Control includes starter protection algorithms to prevent the operator from specifying a starting sequence that might be damaging.</td>
<td>High / Low AC Voltage shutdown</td>
</tr>
<tr>
<td></td>
<td>Under / Over Frequency shutdown</td>
</tr>
<tr>
<td></td>
<td>Loss of sensing voltage shutdown.</td>
</tr>
</tbody>
</table>

**OTHERS**
- Vibration damper.
- Flywheel with housing

[Signature]

C.S.J.M University, Kanpur
ALTERNATOR:
Synchronous alternator of 40 KVA, single bearing, suitable for continuous operation at 1500 RPM generating 415 volts at 0.8 p.f.(lag), 50 Hz, 3 phase, 4 wire system. The alternator shall be Brushless type, self excited & self regulated through an AVR. The alternator will be suitable for tropical climate and shall generally conform to IS : 4722. The salient features of the alternator are:-
- ± 1.5% voltage regulation (max) in static conditions.
- IP : 23 protection with class ‘H’ insulation.
- Permanent lubricating bearing.
- Permissible overload of 10% for one hour in 12 hours of operation.

CONTROL PANEL:
The standard Control Panel is alternator mounted & fabricated from 14 SWG sheet and Powder Coated after seven tank treatment process to give long lasting finish. The panel is equipped with :-
- One no. 3 pole suitably rated MCCB with overload & short circuit protection.
- Aluminium bus bars of suitable capacity with outgoing termination ends.
- Indication lamps for ‘Load On’ and ‘Set Running’.
- Instrument fuses.

D. BASE FRAME
Engine and alternator are mounted, coupled and aligned on a common channel iron fabricated Base Frame with pre-drilled holes.

E. FUEL TANK
Daily service fuel tank of 150 Lt made of 14 SWG sheet metal inbuilt inside base frame complete with drain valve, air vent, inlet and outlet connection. The fuel tank shall be of 8 hours of continuous operation.

F. BATTERY
One no. battery of suitable capacity in uncharged condition with its leads.

G. DOCUMENTATION:
1 set of following documents shall be provides with each set :-
- O & M Manual of Diesel Engine
- Spare parts catalogue of diesel engine
- Test Certificate of diesel engine
- Test certificate of Alternator
- Test Certificate of D.G. Set

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ANNEXURE- 1(B)

SALIENT FEATURES OF ACOUSTIC ENCLOSURE

The acoustic enclosure is made of 14 / 16 gauge CRCA sheet. The salient features of the acoustic enclosure are :-

♦ The enclosure is of modular construction with the provision to assemble and dismantle easily at site.

♦ The sheet metal components are NINE TANK pretreated before powder coating.

♦ The enclosure is powder coated (inside as well outside) with a special pure polyester based powder. All nuts and bolts/external hardware are made from stainless steel.

♦ The doors are gasketed with high quality EPDM gaskets to prevent leakage of sound.

♦ The door handles are lockable type.

♦ Sound proofing of the enclosure is done with high quality PU foam with superior lattice structure for effective sound absorption, fire retardant grade of suitable thickness, die cut and pasted with special adhesive for long durability.

♦ Specially designed attenuators are provided to control sound at air entry and exit points.

♦ Adequate ventilation is provided to meet total air requirement. If required, a blower is provided to meet total air requirement.

♦ Temperature of enclosure does not exceed beyond 5 - 7°C of ambient temperature.

♦ There is a provision of emergency shut down from outside the enclosure.

♦ Noise Level is <75 dB(A) at 1 mtr distance under free field conditions, i.e. as per CPCB norms.

♦ Door hinges are made of anti corrosive special alloy.

♦ Viewing window is fitted with toughened glass instead of acrylic sheet.

Registrar
C.S.J.M University, Kanpur
CHHATRPATI SHAHU JE MAHARAJ UNIVERSITY, KANPUR

NAME AND ADDRESS OF FIRM: .............................................................................................................................................

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

SERVICE TAX REGISTRATION NUMBER:- ..............................................................................................................................

VAT/ TIN/ PAN NO:- ...............................................................................................................................................................

TELEPHONE NO:- .................................................................................................................................................................

DETAILS OF EARNEST MONEY DEPOSIT
BANKERS CHEQUE/ D.D NO. ...................................................................................................................................................
Amount..................................................................................................................................................................................
Date.......................................................................................................................................................................................

DETAILS OF TENDER FEE DEPOSIT:- ..................................................................................................................................
Receipt/ D.D No. ....................................................................................................................................................................... Date
Amount..................................................................................................................................................................................

I have read all the terms and condition and I pledge to abide by them.

DATE & SIGNATURE OF TENDERER (WITH SEAL):- .............................................................................................................

ENCLOSURES:

1. ..........................................................................................................................................................................................

2. ..........................................................................................................................................................................................

3. ..........................................................................................................................................................................................

4. ..........................................................................................................................................................................................

5. ..........................................................................................................................................................................................

Registrar
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