CORRIGENDUM

Reference: This Office NIT No. IITD/DW/24 (E)/EE (E)/2011/11 Dated: 28.08.2011.

Due to some unavoidable circumstances, the date of submission and opening of Tender are hereby extended.

Name of Work :- Implementation of Phase-I of the Energy Audit Report at the IIT Delhi.

Sub Head :- Replacement of 2 Nos. (1 No. 250KVA & 1 No. 500KVA) 20 years old D.G. sets with that of capacity 750 KVA each at IIT Delhi.

<table>
<thead>
<tr>
<th>Estimated Cost (in ₹)</th>
<th>Earnest Money (in ₹)</th>
<th>Time for Completion</th>
<th>Date of submission of Tender</th>
<th>Date of opening of tender</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,70,19,974/-</td>
<td>3,40,400/-</td>
<td>04 Months</td>
<td>08.09.2011</td>
<td>09.09.2011 at 3:30 PM</td>
</tr>
</tbody>
</table>

Other terms & Conditions will remain same.
For details see our web site www.iitd.ac.in

Ch. to : PLN - 02
Work Code WO 2018

To all the approved contractors with us.
Copy to:

1. Executive Engineer (E)
2. A.E. (E)
3. A.E.E. (P)
4. D.A (Works Accounts)
6. Notice Board
7. C.S.S., IIT DELHI: - Display of Tender notice on website at IIT Delhi for wide publicity
Sub-Head: Replacement of 2Nos. (1 No. 250KVA & 1No. 500KVA) 20 years old D.G. sets with that of capacity 750KVA each at IIT Delhi.


Minutes of the pre-bid meeting held on 29.07.2011 at 3PM in the office of the Institute Engineer (AD-220).

Following attended the meeting:
1. Institute Engineer IIT Delhi.
2. Executive Engineer (Elect.) IIT Delhi.
4. Yasser H Khan M/s. Sterling & Wilson

Following points were clarified.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Point Raised</th>
<th>Clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Firms raised point that who would provide the staff/Fuel/POL for testing DG set at the work of OEM/OEA.</td>
<td>Testing of the D.G. Set shall be carried out for 12hrs at the works of OEM/OEA. Staff/ fuel/POL shall be arranged by the successful tenderer. Nothing extra shall be paid on this account.</td>
</tr>
<tr>
<td></td>
<td>1.15.2.4 D.G. set will be tested on load of unity power factor for the rated KW rating. During testing, each of the D.G. sets covered under scope of work, shall be operated for a period of 12 hours on the rated KW at D.G. set's KW rating including one hour on 10% overload after continuous run of the 12hours. During testing all controls / operations safeties will be checked and proper record will be maintained. Any defect/ abnormality noticed during testing shall be rectified. The testing will be declared successful only when no abnormality / failure is noticed during the testing. The D.G. set will be cleared for dispatch to site only when the testing is declared successful by authorised representative / Engineer-in-Charge.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Firms wanted to know the scope of the Civil work with regard to foundation.</td>
<td>All Civil works including foundation at two different locations shall be in the scope of the tenderer. Nothing extra shall be paid on this account. The following minimum standard shall be maintained.</td>
</tr>
<tr>
<td></td>
<td>2.5.1 Genset with acoustic enclosure: A PCC foundation (1:2:4, M-20 grade) of approximate depth of 300 mm is required so as to provide leveled surface for placement of the acoustic enclosure. About 150 mm foundation height should be above ground level. The length and breadth of foundation should be at least 250mm more than the size of the enclosure. Genset should be mounted on AVM's inside the enclosure.</td>
<td>Total depth of the foundation – 450mm 300mm – below ground. 150mm – above ground. Rest of the specifications applicable to foundation mentioned in the tender shall remain unchanged.</td>
</tr>
</tbody>
</table>
3. Firm raised a point that self priming pump is built in feature of there DG set.
2.2.1.7
It shall be so designed that when the engine starts after a long shut down lubrication failure does not occur. Necessary priming pump for the lub. Oil circuit as per recommendation of manufacturer shall be installed, to keep bearings primed. This pump shall be normally automatically operative on AC/DC supply available with the set.

4. Firms informed that manufactures provide common lamp for faults instead of Set of lamps.
2.4.2.2.8(iv)
Set of lamp for engine shut down for over speed, low lub. Oil pressure and high coolant water temperature, overload trip of alternator, earth fault trip of alternator, engine lock out and failure to start etc. All these indications shall be an audio and visual alarm. When operator accepts the alarm, the hooter will be silenced and the fault indication will become steady until reset by operating a reset button.

5. Firms informed that manufactures do not provide lubrication oil temp. indication.
Sr. No. 1 b (iv) B.O.Q.
Lubrication Oil temperature indication.

6. Sr. No. 1 (b), vii) B.O.Q:
Over speed indication.

7. AVR
AVR as a built in part of alternator is also acceptable.

8. Sr. No. 1 (f) B.O.Q:
Exhaust system: Dry exhaust manifold with hospital exhaust silencer and catalytic convertor.

9. Sr. No. 2. (C) B.O.Q.
2 Nos. over voltage relay. 2 Nos. reverse power and 2 nos. under voltage relay.

10. Firms informed that they can provide DG set with O.8 Load factor only
Sr. No. 1, B.O.Q.
Providing, Installing, Testing and commissioning of “Silent type” Diesel generating set along with having Prime Power Rating of 750KVA, 415 Volts at 1500 RPM, 0.8 lagging power factor at 415V suitable for 50 Hz, 3 Phase system & for 0.85 Load Factor and consisting.

11. Ambient temperature for all purposes.
Ambient temperature shall be taken as 50°C every where.
2.3.1. Synchronous Alternator: Self excited, screen protected, self regulated, brush less alternator, Horizontal foot mounted in Single/Double bearing construction (specify one only) suitable for the following:

- Rated PF : 0.8(leg)
- Rated voltage : 415 volts
- Rated frequency : 50Hz
- No. of phases : 3
- Enclosure : SPDP
- Degree of protection : IP-23
- Ventilation : Self ventilated air cooled
- Ambient Temperature : 50°C Maximum
- Insulation Class : F/H
- Temperature Rise : Within class
- Voltage Regulation : ±/- 1%
- Voltage Variation : ± 5%
- Overload duration/ capacity : 10% for one hour in every 12 hour of continuous use.

- Frequency variation : As defined by the Engine Governor (±/- 1%)
- Excitation : Self / separately excited
- (Self excitation upto 750KVA ans separately excited system above 750KVA.

- Type of AVR : Electronic
- Type of Bearing and lubrication arrangement:
  Anti-friction bearing with Grease lubrication.
- Standard : IS-4722 & IEC-34 as amended up to date.

13. Firms iterated that they are OEMs/OEAs. Hence their acoustic enclosures must also be acceptable with other Makes of Acoustic enclosures.

14. Make of LT Electrical Panels

- OEM/OEA manufactured LT Electrical panel is also acceptable in addition to stipulated makes, provided same is CPRI approved.

15. Provision of end termination of control cables.

- Provision of end termination of control cables shall be in the scope of tenderer. Nothing extra shall be paid on this account.
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>B.O.Q.</th>
<th>Electrical approval of the D.G. Set from the local / central authority shall be in the scope of tenderer. Nothing extra shall be provided on this account.</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Sr. No. 1(h) B.O.Q.</td>
<td>Electrical approval of D.G. set.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>2.4.2.210</strong> Compatibility with Building Management System (BMS): PLC compatibility &amp; required No. of Input /Output terminals points should provided in the AMF control panel.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Building Management System port will be provided only which can provide energy data from the multi-function meter through RS 485. D.G. starters shall also be made available for remote. It shall be possible to stop the D.G. set from remote. The common fault of D.G. set shall be available for remote through potential free contact.</td>
</tr>
</tbody>
</table>

Date of submission of tender shall be **08.09.2011** upto 04:00PM

Date of opening of technical bid **09.09.2011** at 3:30PM

Institute Engineer

Executive Engineer (Elect.)

D.A.