

N/W.: Implementation of phase -1 of Energy audit report at IIT Delhi.

- **Replacement of 40 years old 1X80 TR and 2X60 TR reciprocating chilling Machines with 3X100 TR Energy efficient screw type Chilling Machines of MSB Central AC Plant.**

Sub.: Minutes of the pre-bid meeting held on 11/10/2011 at 3:00 PM

- Clarifications to points raised by the tenderers.

Following attended the pre-bid meeting

FROM IIT DELHI.

1. Institute Engineer
2. Executive Engineer (Elect.)
3. D.A.
4. Sr. F.M. (AC)

TENDERERS / FIRMS:

1. Mr. Ankit Gulati M/s. Blue Star Ltd.
2. Mr. Amit Gupta M/s. H.V. Air-conditioning System Pvt. Ltd.
3. Mr. Devender Singh M/s. Voltas Ltd.
4. Mr. R.K. Talwar M/s. Comfort System.
5. Mr. B.S. Saggi M/s. Air Temp Engineers.

Following clarifications are issued to the queries raised by the tenderers and shall form the part of agreement.

S.No.	Point Raised	Clarification
1	Page -62-63 (Item no. 21 of schedule of quantity) Operation & maintenance (routine & preventive) and break down maintenance of high side and low side of the Air conditioning plant comprising of all the machinery, equipment installed in the A.C. plant room including cooling towers in two shifts of 8 hours each during five years subsequent to one year guarantee period as per maintenance schedule attached at Annexure 'IV'. Plant shall however be operated for 12 months.	It is clarified that the item is only for operation of the plant in two shifts i.e. 06.00 AM to 02.00 PM and 02.00 PM to 10.00 PM or as required depend on halls bookings. Firm will have to depute 01 no Mechanic (ITI qualified) and 01 no Helper in each shift. Maintenance of the plant room is covered under the scope of Guarantee clause page no-28 of the tender document. A supplementary annual agreement for Item No. 21 Page No. 62-63 shall be drawn for the operation of the AC Plant for six years which shall be renewed on expiring of each year and clause 10-C of the general conditions of the contract for IIT Delhi works department shall be applicable.
2	Page -49 (Air distribution system) 1. Monthly and annual inspection prior to expiry of warranty period 2. Carry out space temperature checks on air-conditioned areas with thermo hydrograph. Balance air flow as necessary to compliance with requirements of original specifications. These checks include the calibration of sensors, thermostat, etc.	Contractor shall carry out temperature checks only. Rest of the conditions shall remain unchanged.

3.	Page- 49 (De-scaling of system) De-scaling of condenser, all pipe lines of condenser, valves installed in system with chemical (Super floc 6110) and Roding.	Chemical equivalent to Superfloc-6110 may also be used. Rest of the conditions shall remain unchanged.
4.	Page-52 (Item (f) and Sr, no.- 24) Gas	Gas means refrigerant gas and its storage at site per day shall not be less than 60 Kg.
5.	Page-39 (Initial inspection at manufacturer's works) 4.2 Initial inspection at manufacturing works 4.2.1 Screw compressor 4.2.2 Condensers 4.2.3 Chillers	Test certificate issued by OEM for the items covered under 4.2.1, 4.2.2, 4.2.3 shall be accepted to the department instead of inspection at the site of OEM. However, full load test shall be carried out to verify the capacity and IKW/Ton at OEM's works.
6.	Page-58(Item no. 1-1 of schedule of quantity) L- Lot- Suction line and chiller insulation with minimum 19 mm thick polyvinyl nitrile rubber insulation finished with 0.63 mm thick G.S.S. cladding complete as required.	G.S.S. cladding can be provided at site. Rest of the conditions shall remain unchanged.
7.	Page- 58(Item no. 2 of schedule of quantity) 2 (a). Split casing type pump.	It is clarified that pumps shall be horizontal split type and the capacities shall be as under: Condenser pump-20HP Chiller pump -15 HP
8.	Page- 58(Item no. 3 of schedule of quantity) 3 (a). Split casing type pump.	It is clarified that pumps shall be horizontal split type and the capacity shall be 15 HP for Chiller pump.
9.	Page - 58(Item no. 2(b) & Item no. 3(b) of schedule of quantity) SPDP squirrel cage induction motor with class 'B' insulation, 1440 rpm synchronous speed, operating on 415 ± 10% volts, 3 phase, 50 Hz A.C. supply.	TEFC motors with class 'F' insulation are also acceptable. Capacities of the motors shall be as under: (i) For condenser pump-20HP (ii) For chiller pump -15HP
10.	Page - 27(Power and water supply) Electrical power and water supply.	It is accepted that electrical power supply and water supply shall be supplied free of cost by the department for this work.
11.	Page - 26(SUBMISSION OF TENDER AND OPENING OF TENDERS) h) The design of the chillers, foundations, pipe lines, chillers / condensers pumps etc. which will include sizes of pipe lines, positions of different valves etc. i) Lay out of equipments in the existing available space of plant room.	It was accepted by the department that (h) the design and (i) Lay out of equipment shall be submitted by the successful tenderer alongwith working/ shop drawings in 10 days from issue of letter of award.
12.	Inclusion of York make chilling unit in acceptance makes.	The request was not acceded to as there are already six numbers acceptable makes in the tender.

13.	Page -59 (Item no. 4 of schedule of quantity) 4. Heat rejection capacity of cooling tower.	No deviation from the stipulated capacity is acceptable															
14.	Page -61 (Item no. 10 of schedule of quantity) 10. Provision of expansion tank.	No deviation from the BOQ is acceptable.															
15.	Page -61 (Item no. 15 of schedule of quantity) Electrical panel	No deviation from the BOQ and specification is acceptable.															
16.	Page -62 (Item no. 20 of schedule of quantity) Dismantling	Dismantling of entire plant consisting of chilling machines, pumps, motors, starters, piping and valves etc. shall be in the scope of work to be carried out by the contractor. The stacking of above material within IIT, Delhi campus shall also be in the scope of the contractor.															
17.	Page -1 (Press notice) Earnest money deposit.	Earnest money deposit shall be strictly as per the conditions of the press notice.															
18.	Page -27 (Payment terms.)	Following payment terms shall be applicable for this tender. <table border="1"> <thead> <tr> <th></th> <th>Machines & equipment</th> <th>All other items</th> </tr> </thead> <tbody> <tr> <td>(1) After initial inspections and delivery at site in good condition as prorate.</td> <td>80 %</td> <td>70 %</td> </tr> <tr> <td>(2) On completion of prorate Installation.</td> <td>10 %</td> <td>20 %</td> </tr> <tr> <td>(3) On commissioning and Completion of successful Running in period.</td> <td>5 %</td> <td>5 %</td> </tr> <tr> <td>(4) On completion of major Seasonal test.</td> <td>5 %</td> <td>5 %</td> </tr> </tbody> </table>		Machines & equipment	All other items	(1) After initial inspections and delivery at site in good condition as prorate.	80 %	70 %	(2) On completion of prorate Installation.	10 %	20 %	(3) On commissioning and Completion of successful Running in period.	5 %	5 %	(4) On completion of major Seasonal test.	5 %	5 %
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19.	Page -28 (Guarantee) Security deposit.	Security deposit shall be as per the GCC 2010 IIT, Delhi and as per Guarantee clause page – 28 of the tender document.															

**Date of Receipt of tender
(Part-I Technical cum commercial bid
& Part-II financial bid)**

- 24.10.2011 upto 3:00PM

**Date of Opening
(Technical cum commercial bid)**

- 24.10.2011 at 3:30 PM


Institute Engineer


E.E. (Elect.)


D.A.


Sr. F.M. (AC)