INDIAN INSTITUTE OF TECHNOLOGY, DELHI 20... 1 IWOR 3 010

HAUZ KHAS, NEW DELHI - 110016 - im/Date

No.IITD/DW/24 (E)/EE (E)/2011/

Dated /08/2011

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.

Estimated Cost (in ₹.)	Earnest Money (in ₹)	Time for Completion	Date of submission of Tender	Date of opening of tender
1,70,19,974/-	3,40,400/-	04 Months	08.09.2011 Upto 3:00 PM	09.09.2011 at 3:30 PM

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

Executive Engineer (E)

Ch. to: PLN - 02 Work Code WO 2018

To all the approved contractors with us. Copy to:

- Executive Engineer (E)
- A.E. (E) 2.
- A.E.E. (P) 3.
- D.A (Works Accounts)
- D.R. (A/c's): For opening of Tenders on 09.09.2011 at 3.30 P.M in the Office of E.E (E) 5.
- Notice Board 6.
- C.S.S., IIT DELHI: Display of Tender notice on website at IIT Delhi for wide publicity 7.

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

NIT No. IITD/DW/24(E)/E.E.(E)/2011/11, Dated: 28.06.2011.

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.

3. D.A.

IIT Delhi.

4. Yasser H Khan

M/s. Sterling & Wilson

5. Sanjay Swain

M/s. Sudhir Gensets Limited.

Following points were clarified.

S.No.	Point Raised	Clarification
1.	Firms raised point that who would provide the staff/Fuel/Pol for testing DG set at the work of OEM/OEA. 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.	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. There is no change in the condition of the tender.
2.	Firms wanted to know the scope of the Civil work with regard to foundation. 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.	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. 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.

1		ritin taised a point that sent printing pump to	The Control of the Co
.	1	built in feature of there DG set.	the D.G. Set as per manual.
	1	2.2.1.7	specifications shall also acceptable.
1		It shall be so designed that when the engine	
	1	starts after a long shut down lubrication failure	Rest of the condition will remain same.
1		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	
	Ī	automatically operative on AC/DC supply	
		available with the set.	
	4.	Firms informed that manufactures provide	Common lamp for all faults is also
		common lamp for faults instead of Set of	acceptable.
		lamps.	However, nature of fault will be
		2.4.2.2.8(iv)	displayed at the controller as per
		Set of lamp for engine shut down for over	manufacturer's specifications with Audio
	-	speed, low lub. Oil pressure and high coolant	visual alarms. Rest of the condition
		water temperature, overload trip of alternator,	remains unchanged.
	1	earth fault trip of alternator, engine lock out	3
		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	Item deleted
		provide lubrication oil temp. indication.	Trom deleted.
		Sr. No. 1 b (iv) B.O.Q.	
		Lubrication Oil temperature indication.	
	6.	Sr. No. 1 (b), vii) B.O.Q:	Over speed indication may be read as
	0.	Over speed indication.	over speed trip indication.
	7.	AVR	AVR as a built in part of alternator is
	,		also acceptable.
	8.	Sr. No. 1 (f) B.O.Q:	Catalytic converter is not required.
	0.	Exhaust system: Dry exhaust manifold with	
		hospital exhaust silencer and catalytic	•
		convertor.	
	9.	Sr. No. 2. (C) B.O.Q.	1No. over load relay & 1No. reverse
	<i>)</i> .	2 Nos. over voltage relay. 2 Nos. reverse	power relay shall be part of controller
		power and 2 nos. under voltage relay.	and 1No. over load relay & 1 No. reverse
	1	power and 2 nos. under voltage relay.	
	10	Firms informed that they can provide DG set	power relay shall be provided extra. 0.8 load factor is acceptable in place of
	10.	with 0.8 Load factor only	0.85 as specified in the tender.
		Sr. No. 1, B.O.Q.	0.65 as specified in the lender.
		t and the second of the second	
)	
		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.	Ambiana and the control of the contr
	11	Ambient temperature for all purposes.	Ambient temperature shall be taken as 50°C
	L	J	every where.

,	2.3.1 Synchronous Alternator: Self excited, screen	Class of Insulation shall be H to H.
	•	
	protected, self regulated, brush less alternator,	
	Horizontal foot mounted in Single/Double	ļ
	bearing construction (specify one only)	}
ł	suitable for the following:	
}	Rated PF : 0.8(leg)	
	Rated voltage : 415 volts	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
1	Rated frequency: 50Hz	
- 1	No. of phases : 3	
1	Enclosure : SPDP	
1		
ļ	Degree of protection: IP-23	
}	Ventilation : Self ventilated air cooled	
}	Ambient Temperature : 50°C Maximum	{
{	Insulation Class : F/H	
.	Temperature Rise: Within class	
1	Voltage Regulation : ±/- 1%	
l	Voltage Variation : ± 5%	
{	Overload duration/ capacity : 10% for one	
[hour in every 12 hour of continuous use.	
. }		
1	Frequency variation : As defined by the	
j	Engine Governor (±/- 1%)	{
}		. .
1	Excitation : Self / separately excited	
}	(Self excitation upto 750KVA ans separately	
ł	excited system above 750KVA.	
}	excited system above 75012 VII.	1
	Type of AVR : Electronic	
	Type of Bearing and lubrication arrangement:	
	Anti-friction bearing with Grease lubrication.	1
{	•	
į	Standard : IS-4722 & IEC-34 as amended	
{	upto date.	
13.	Firms iterated that they are OEMs/OEAs.	OEM/OEA manufactured acoustic
	Hence their acoustic enclosures must also be	
	accepted with other Makes of Acoustic	1 **
	enclosures.	1 -
		1
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
15.	riovision of the termination of control cables.	1
		cables shall be in the scope of tenderer.
		Nothing extra shall be paid on this
		account.

16. Sr. No. 1(h) B.O.Q.	Electrical approval of the D.G. Set from
Electrical approval of D.G. set.	the local / central authority shall be in the scope of tenderer. Nothing extra shall be provided on this account.
Compatibility with Building Management System (BMS): PLC compatibility & required No. of Input /Output terminals points should provided in the AMF control panel.	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.

Date of submission of tender shall be 02.09.2011 upto 04:00PM

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

Institute Engineer

Executive Engineer (Elect.)

D.A.