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TENDER SPECIFICATION

TENDER NO. BHEL: NR: SCT: MSIL: GTG: 618

FOR

TENDER FOR THE WORK OF “MATERIAL HANDLING, ERECTION, TESTING, COMMISSIONING, TRIAL OPERATION AND HANDING OVER OF 1 X 20 MW FR V GTG SET INCLUDING AUXILIARIES, PIPING, ASSOCIATED ELECTRICAL, C&I EQUIPMENT, ETC. AT MARUTI SUZUKI INDIA LTD., MANESAR, GURGAON, HARYANA”

PART II– PRICE BID



Bharat Heavy Electricals Limited
(A Govt. Of India Undertaking)
Power Sector – Northren Region,
Plot No. 25 , Sector - 16A ,
Distt. Gautam Budh Nagar, NOIDA – 201 301.INDIA



ISO 9001-2000, ISO 14001
and OHSAS 18001 certified
company
SubContract and Purchase
Deptt.

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Plot No. 25 , Sector - 16A ,
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IMPORTANT NOTE

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THIS TENDER SPECIFICATION ISSUED TO:

M/S-----

RATE SCHEDULE**AAA)**

SL.NO.	DESCRIPTION	UNIT RATE IN RUPEES	TOTAL PRICE IN RUPEES
(AA)	E&C of GTG Works		
1.	Lump sum price for complete scope of work for ETC as per tender specification for items indicated under Annexure-IX– All the Mechanical items of GTG (1X20 MW GTG) and its auxiliaries, Piping, Insulation etc. tentatively listed under Annexure IX and barricading of open store yard (100M X 150M) including temp. Electrical Power Distribution.	L.S	
2.	Lumpsum price for complete scope of work for ETC of Electrical and C&I equipments to complete the system of GTG and its auxiliaries tentatively listed under Annexure IX.	L.S	
Total (AA)			
(BB)	Materials Handling		
1.	Entire scope of Material Handling for the materials as specified in the tender specifications for approximate weight 300MT for Handling of equipments as listed in Annexure IX.		
2.	Lumpsum rate for GT unloading using sleeper jack method (Appx Wt. 88 MT)	L.S	
3.	Lumpsum rate for Generator unloading using sleeper jack method (Appx Wt. 62 MT)	L.S	
Total (BB)			
(CC)	Items (as per scope mentioned in Annexure-XI)		
1	Temporary Covered storage shed (15 X 10 SQM) as per specifications, drawings / documents attached. (In accordance to BOQ rate schedule BBB-I)	Total Price BBB-I	
2	Area development with materials (In accordance to BOQ rate schedule BBB-II)	Total Price BBB-II	
Total (CC)			
GROSS TOTAL (AA+BB+CC)			

NOTES :

1. Accordingly taking into consideration all aspects thereof quoted above rates, further contractor confirms that he will not come with any other claim/compensation on account of any increase whatsoever during the entire period of execution including extended period if any.
2. The rate shall be entered in figures as well as in words. In case of difference in rates between words and figures, the lesser of the two will be treated as valid rate.
3. Only 'Unit Rate' shall be considered for evaluation and award.
4. Evaluation shall be done considering all the items and respective quantities mentioned.
5. In case of omission in quoting any rate, the evaluation will be done considering the highest quoted rate obtained against that item. But the work, if awarded, will be on the lowest quoted rate obtained against that item.
6. Total price for CC-1 will be taken from total price worked out as per Annexure- BBB-I.
7. Total price for CC-2 will be taken from total price worked out as per Annexure- BBB-II.

(Seal and Signature of Tenderer)

RATE SCHEDULE (Refer Annexure XI)**BBB-I)**

SI No	CODE	DESCRIPTION OF ITEM	UNIT	TOTAL QTY	UNIT RATE (Rs)	TOTAL AMOUNT (Rs)
		Q CIVIL WORKS FOR COVERED STORE SHED (15MX10M)		CLOSED STORE (15mx10 m)		
		EARTHWORK/SITE CLEARANCE/ROADWORK				
1	C3	Earth work in excavation in all types of ordinary and hard soil by mechanical means (Hydraulic excavator)/manual means including stacking the excavated soil, dressing of sides and ramming of bottom, dewatering of accumulated water from any source and keeping the surface dry for subsequent works such as concreting form work etc. and disposal of surplus excavated soil as directed, disposed soil to be neatly levelled and dressed lead upto 50 meters and lift upto 1.5meter complete including backfilling excavated earth and disposal if required.	Cu.M	55		
2	C11	Supplying the good earth from outside the site including the cost of filling the same within the site in layer not exceeding 20cm in depth & consolidating each deposited layer by ramming and watering including all leads & lifts etc. complete.	Cu.M	30.00		
		PCC				
3	C14	Plain cement concrete of mix 1:4:8 (1 cement : 4 coarse sand and 8, 40 mm down graded stone aggregate) for column footing, levelling, floors etc., including cost of all materials, lead, lift, labour charges, consolidation, shuttering, curing etc. complete.	Cu.M	20.00		
		BRICKWORK				
4	C18	Brick work with class designation 75 in cement mortar 1:6 (1 cement : 6 coarse sand) in foundation, plinth and super structure in thickness of 230 mm including cost of all materials, lead lifts, labour charges, mixing mortar, laying bricks, racking joints, curing etc. all complete as per drawing and specification and direction of Engineer In-charge.	Cu.M	15.00		

		RCC				
5	C20	Reinforced cement concrete of mix 1:1.5:3 (1 cement, 1.5 coarse sand and ,3 :20 mm down graded aggregate) for column footing, sunshades, shelves, lintels etc. including cost of materials, lead lift, labour charges for concreting, shuttering, curing etc. complete.	Cu.M	10.00		
6	C21	Centring and shuttering including providing all shuttering material , strutting, propping etc. and removal of form work for : Lintels, beams, plinth beams, girders, bressumers and cantilevers.	Sq.M	45.00		
7	C22	Providing and placing mild steel/ tor steel reinforcement for RCC work including cost of all materials, labour for cutting, bending, binding and placing in position complete as per drawing and instruction of Engineer.	MT	0.30		
		ROOFING				
8	C24	Supply fabrication and erection of structural steel beams,channels,plates,steel tubular trusses, purlines,gates, wind ties, base plates, gusset plates, bolts, nuts etc. complete as per drawings, specifications & instructions of engineer including cost of all materials leads, lifts labour charges etc. and one coat of primer and two coats of approved enamel paint for finished products at site complete as per technical specification and direction of engineer.				
	a)	Trusses (medium grade pipes),Purlins side ties, bottom ties, 150 ISMB Columns including foundation bolts	MT	4.00		
9	C26	Providing and fixing 1mm thick M.S. sheet sliding-shutters with frame and diagonal braces of 40x40x6mm angle iron, 3mm M.S. gusset plates at the junction and corners 25mm dia pulley, 40x40x6mm angle and T-iron guide at the top and bottom respectively including applying a priming coat of approved steel primer and two coats of enamel paint.				
	a)	Mechanically Operated	Sq.M	25.00		
10	C27	Providing and fixing corrugated asbestos cement sheet 6 mm thick roofing and side cladding fixed with polymer coated J or L hooks bolts and nuts 8mm diameter with bitumen and GI limpet washer complete (upto a pitch of 60 degrees) including steel primer and 2 coats of approved paint at overlaps. as per tech. specification.	Sq.M	400.00		

11	C29	Providing and fixing non-asbestos cement ridges and hips including supply and fixing J or L bolts and nuts bitumen & GI washers etc. complete as per Technical Specification including Bitumen coating at all joints .	RM	15.00		
		FINISHING				
12	C32	50 mm thk. Ironic Topping Cement Concrete flooring consisting (1-admixture:2-stone aggregate 6mm nominal size) by volume with metallic hardening compound of approved quality is mixed in the ratio (4:1) (4 cement : 1 metallic floor) hardening compound of approved quality by weight including cement slurry rounding off edges and strips etc. but excluding the cost of nose of steps etc. complete.	Sq.M	150.00		
13	C33	Providing and fixing glass strips in joints of terrazo / cement concrete floors 40mm wide and 4mm thick	RM	90.00		
14	C38	Plastering work with cement mortar 1:6 (1 cement : 6 fine sand) 12 mm thick after scrapping and cleaning the masoary joints including scaffolding, cost of materials, labour, mixing , leads & lifts, curing etc. complete.	Sq. M	90.00		
15	C49	Providing three coats of white wash to give a smooth and even shade including cost of materials, cleaning and preparation of surface, scaffolding etc. complete.	Sq.M	90.00		
		(B) ELECTRICAL WORKS				
16	E1	Providing and fixing 1 x 40 Watt Batten type fluorescent tube fitting (Crompton / Philips / Bajaj make), fabricated from CRCA sheet steel and finished with stove enamel paint complete with Accessories like fluorescent lamp, copper wound polyster choke, starter, seat, rotor holder and terminal block duly pre-wired with copper conductor, including connections, fixing on wall, false ceiling or under roof tusties with clamps as required	Nos.	8		
17	E5	Providing and fixing of following sweep exhaust fan/ceiling fan/wall mounted fan (Khaitan / Crompton make) single phase alongwith gravity louvers, frame / tripod for holding the motor including making necessary opening in wall, supply & fixing of assembly with grouting bolts, making connections, loop earthing etc.				
		300 mm sweep	Nos.	1		
18	E8	Providing & fixing of 240 V, 5 / 15 Amp 6 Pin Power socket outlet point (with 15 A switch). Switch / socket to be fitted in suitable size 20 SWG metal type box with 3mm sunmica sheet	Nos.	1		
19	E10	Providing & fixing 5A piano type switch for Light / Fan Control (Anchor make)	Nos.	8		

20	E20	Wiring of the following points (including supply of Wires, conduits, clamps, boards, other misc. items) with 2.5 sq.mm colour coated PVC insulated copper conductor wires as per IS- 650/1100 volts grade in surface PVC conduits (medium grade) including laying of 20 SWG GI wire, conduit fitting. (Fixing of piano type control switches (Anchor make) in suitable sized 20 SWG metal box with 3 mm sunmica sheet having provision for fan regulator, 5 Amp switch socket (supplied above) included in scope)				
	a)	Light point wiring including main wiring	Points	8		
	b)	Wiring for exhaust fan.	Points	1		
21	E21	Providing , Installation and commissioning of 18 W Lighting Panel with 18 nos 16 A MCB with 63 A SFU incomer in Sheet metal housing with double door arrangement , including all earthing and statutory requirements .	Nos.	1		
22	E23	Supplying and laying of following type of PVC Insulated, PVC armoured standard aluminium conductor cable confirming to IS:1554-1976 (part 1), glanding with single compression gland, termination of both end in DB & SFU. The cable has to be laid underground on sand cushion including backfilling, suitable clamp, clamping on surface including all materials etc. complete.(Only cable will be issued by BHEL as free issue item and all other materials are to be provided by the contractor).This includes road crossing for which suitable GI Pipe to be provided by the contractor.				
	a)	2c/3c/4c upto 16 sq.mm armoured cable	RM	20		
GROSS TOTAL OF ALL THE ABOVE WORKS (A+B)						

BBB-II) SITE DEVELOPMENT WORKS (Refer Annexure XI)

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	UNIT RATE	AMOUNT
	ROADS				
1	Surfact dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50m and lift upto 1.5m in all kinds of soil.	sqm	10000		
2	Preparation and consolidation of site area with power road roller of 8 to 12 tonne capacity after levelling, grading, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the subgrade and disposal of surplus earth lead upto 50 Mtrs	sqm	10000		
3	Supply and Laying water bound macadam with specified stone aggregate stone screening and binding material including screening, sorting, spreading to template, watering and consolidation with power road roller of 8 to 10 tonne capacity etc. complete including supplying of all materials:				
a)	base course with 63 mm to 45 mm size including stone screening 13.2 mm size	cum	360		
4	Supply and spreading of moorum at site (1" thick) over WBM complete with rolling	cum	90		
	GROSS TOTAL OF ALL THE ABOVE WORKS				

NOTES FOR BBB-I & BBB-II:-

1. The rate shall be entered in figures as well as in words. In case of difference in rates between words and figures, the lesser of the two will be treated as valid rate.
2. Only 'Unit Rate' shall be considered for evaluation and award
- 3.. Evaluation shall be done considering all the items and respective quantities mentioned
4. In case of omission in quoting any rate, the evaluation will be done considering the highest quoted rate obtained against that item. But the work, if awarded, will be on the lowest quoted rate obtained against that item.

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