



BANK OF MAHARASHTRA
LOKMANGAL, 1501,
SHIVAJINAGAR, PUNE-411 005.

TENDER NO. AX1/CSD/TENDER/18/22-23

TENDER DOCUMENT FOR “SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 500 KVA DIESEL GENERATOR ALONG WITH COMPREHENSIVE MAINTENANCE FOR 05 YEARS AT HEAD OFFICE, BANK OF MAHARASHTRA, LOKMANGAL PUNE”

PRICE BID
(BILL OF QUANTITIES)

Name of Work "SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 500 KVA DIESEL GENERATOR ALONG WITH COMPREHENSIVE MAINTENANCE FOR 05 YEARS FROM 2ND YEAR FOR HEAD OFFICE, BANK OF MAHARASHTRA, LOKMANGAL PUNE"

S No.	Description	Unit	Quantity	Unit Rate	Total Amount
A.	SUPPLY INSTALLATION TESTING & COMMISSIONING OF 500 KVA DG SET				
1.0	Supply, Installation Testing Commissioning of 500KVA SILENT DG Set, continuous duty cycle, comprising of engine Coupled to 500/400 KW KVA, 415 V , 50 Hz 0.8 Power Factor alternator with star connection CTs brought out from centre point of Alternator and connections brought out to cable end box. The Engine plus Alternator is to be mounted on a common base frame, complete along with Electronic Fuel and Speed Governor and separate controller with RS485 and IP MOD Bus port for Connecting the DG set for Operation and monitoring of all Engine and Alternator Parameters with CPCB approved acoustic enclosure along with necessary civil modification work for the existing foundation if any and as per technical specifications of tender document. Also supply and Installation of AMF Panel as per OEM Standard & inclusive of following:				
	(a) Batteries & Leads.	No	1		
	(b) AVM Pads.				
	(c) Residential Silencer.				
	(d) First fill of lube oil.				
	(e) Inbuilt Fuel tank 990 litres.				
	(f) Adopter Box with extended Bus Bar				
	(g) Manual Hand transfer pump with 10 mtrs long hose pipe for Transferring Diesel From Barrels to Day Fuel Tank				
	(h) Fuel piping from DG fuel tank using MS welded pipes of minimum 25 mm, with all fittings like bends, elbows, tees etc. along with all valves, flanges for supply and Return line all complete.				
	(i) 1 Nos of Day Storage tank of 990 Liters couplted together for Each DG Set along with Fuel Glass gauge with Level Marking and talso the Three probe Diesel Level sensors connected to BMS system to indicate the Diesel Avalaible in the Tank with necessary controllers and sensors . the Day day tank shall be fabricated using MS plates and painted with approved color epoxy paint all complete as required				
	The above mentioned DG set along with Acoustic enclosure and the AMF panel as described in the detail technical specifications all complete as required and as per the final direction and the approval of the Consultants/Bank. This description shall be considered				

S No.	Description	Unit	Quantity	Unit Rate	Total Amount
	with all terms and conditions of the Technical Bid				
2.0	EXHAUST SYSTEM STACK FOR 500KVA DG SET				
	Supply , Installation , Testing and Commissioning of the Following Sizes of the Pipes for the DG Sets Exhaust as per the Pollution Control Boards Norms and the Height of the Stack shall be 10 meters all complete as required and as per the final direction and the approval of the Consultants.				
(a)	Supply & installation of 14" MS Vertical Black Pipe 4.85mm thick complete with Bends & Flanges & support structure	R.M	15		
(b)	10" MS Horizontal Black Pipe 4.85mm thick complete with Bends & Flanges & support structure	R.M	12		
(c)	Thermal Insulation on horizontal pipe with Mineral Wool 50mm Thick wire mesh and 26 gauge aluminium cladding	R.M	25		
(d)	Aluminium cladding for the residential silencers & support structure	R.M	5		
(e)	SS Flexible Bellows near Manifold of Exhaust & support structure	No	2		
(f)	Y-bend.	No	2		
(i)	Supply and Installation of Exhaust Piping through the Building Duct and wherever not possible fabricate steel Stack Structure using Suitable Sizes of Angles Channels and Beams and Plates and Necessary plates , NUTS Bolts all complete with erection of the structure and minimum 25 Meters Height for exhaust piping. with necessary Base frames all complete and painting the same using two coats of Red oxide and Three coats of EPOXY Paint all complete as required and as per final direction and approval of the consultant.	LS	1		
3.0	ELECTRICAL CABLING WORK				
	Supply, handling, laying effective proper connections, testing and commissioning of following sizes of 1.1 kV grade XLPE insulated Aluminium/Copper conductor cables laid over GI supports, GI cable Trays or fixing on walls including clamping the cable to supports in an approved manner, pulling through trenches, hump pipes etc. as required complete with Copper earthing as specified for continuous earthing along with the cable. (Earthing will be measured separately and need not be quoted under this item) all complete as required and as per final direction and approval of the Consultants.				
3.1	3.5 Core x 240 sq.mm, XLPE Insulated Aluminium Conductor Armoured Cable of approved make only.	R.M	150		
3.2	3C x 4 sq.mm.XLPE Insulated Copper Conductor Armoured Cable of approved make only.	R.M	50		
3.3	12C x 1.5 sq.mm PVC Insulated Shielded Copper	R.M	50		

S No.	Description	Unit	Quantity	Unit Rate	Total Amount
	Conductor Armoured Cable of approved make only.				
4.0	CABLE TERMINATIONS				
4	Supply and making terminal joints for the following sizes of 1.1 kV grade XLPE insulated Aluminium/Copper conductor cables including providing heavy duty tinned copper lugs, crimping type; insulation tape, Heavy duty Double compression type brass glands effecting and terminating the cables in Equipment/Panel all complete as required as per final direction and approval of the Consultant.				
4.1	3.5 Core x 240 sq.mm, XLPE Insulated Aluminium Conductor Armoured Cable of approved make only.	No	8		
4.2	3C x 4 sq.mm.XLPE Insulated Copper Conductor Armoured Cable of approved make only.	No	4		
4.3	12C x 1.5 sq.mm PVC Insulated Shielded Copper Conductor Armoured Cable of approved make only.	No	4		
5	Earthing				
5.0	Providing earthing stations at locations as called for using 600 x 600 x 6.0 mm thick tinned Copper earth electrode 19 mm dia. with `C` class GI pipe of Tata Steel Company make for water purpose with GI funnel fabricated using 18 gauge GI Sheets, Wire mesh for funnel, Masonry chamber using good quality Bricks and smooth sand Cement Plaster with Necessary concrete Foundation base, heavy duty MS Plate manhole cover as spelt above with frame. The Pit is to be filled up to 1.0 Meters using mixture of charcoal and salt around plate electrode. The rate shall also include supply and erection of 25 x 6 mm. tinned copper strips from the earthing plate up to the ground level. No separate rate shall be paid for this strip and the same is to be included in the unit rate of the earth stations all complete as required and as per final directions and approval of the Consultant.	No	4		
5.1	Providing and fixing in position, the following sizes of earthing strips or wires including providing all fixing accessories and effecting proper connections and as per final directions and approval of the Consultant.				
(a)	50 x 6 mm Tinned Copper tapes. - DG Neutral Earthing & Panel Earthing	R.M	50		
(b)	25 x 6 mm Tinned Copper tapes. - Ups Earthing/ Grid Earthing	R.M	50		
(c)	8 SWG bare Copper earth wire. - Cable Earthing	R.M	50		

S No.	Description	Unit	Quantity	Unit Rate	Total Amount
5.2	Supply, Installation, Testing & Commissioning of 100mm x 450 mm long, 8 mm thick Copper Busbars for Internal Grounding Bar (IGB) earthing, mounted on SMC supports including all necessary mounting & framework required for the same all complete as required as per final directions & approval of Consultant.	No	4		
5.3	Should have inner dimension of 300 mm x 260mm x 240mm made of FRP material, flush mounted, removable, lockable cover of the earth pit with able to withstand 15KN.The area inside the inspection chamber should be such that ,the UNIVERSAL,CLAMP/EBB/BUS bar is not too deep inside the inspection chamber or projecting out of projection chamber. The chamber should have facility for marking earth resistance and latest testing date by paint at the cover and previous recorded values inside the cover.	No	4		
	SUB TOTAL(A)				
	CGST	9%			
	SGST	9%			
	TOTAL INCL GST				
B	COMPREHENSIVE MAINTENANCE : Shall commence after completion of Defect Liability Period.				
1.1	2 ND YEAR	LS	1		
1.2	3 RD YEAR	LS	1		
1.3	4 TH TEAR	LS	1		
1.4	5 TH YEAR	LS	1		
1.5	6 TH YEAR	LS	1		
	SUB TOTAL(B)				
	CGST	9%			
	SGST	9%			
	TOTAL INCL GST				
C	Schedule of Credit				
1	Dismantling of Existing DG Set along with Acoustic Enclosure and Exhaust System and officer Buyback Value to Bank Of Maharashtra along with all necessary Cabling, AMF Panels etc. all complete as required and as per the final direction and Approval of the Consultants and Bank. The Buyback value (incl GST) will be deducted while paying the Bill amount by the clients & scrap invoice shall be issued.				
2	Same as C1 For 500 KVA	LS	1	1,50,000	1,50,000
3	Same as C1 For 50 KVA	LS	1	50,000	50,000
	SUB TOTAL(C)				2,00,000
	CGST	9%			18,000
	SGST	9%			18,000
	TOTAL INCL GST				2,36,000

TOTAL AMOUNT (A) BASIC : Rs.

TOTAL AMOUNT (B) BASIC : Rs.

TOTAL AMOUNT (C) BASIC : Rs. 2,00,000/-

TOTAL AMOUNT (A+B- Rs. 2,00,000) BASIC Rs. _____ (excl GST)

TOTAL AMOUNT (A+B- Rs. 2,00,000) BASIC in words: Rs. _____ (excl GST)

(Signature of the authorized person with stamp of the firm/company)

Name of the authorized person:

Date:

Declaration by Bidder:

I/We M/s..... have read & understood all the terms and conditions of tender, have acquainted to the site conditions and considering aforesaid and prevailing market conditions have quoted rate in price Bids.

SEAL & SIGN OF CONTRACTOR

Note: The Price Bid shall cover all clauses of the technical specifications and Detailed Scope of Work as per the tender.