



TENDER FOR " SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 500 KVA 11 KV/433V CAST RESIN TRANSFORMER & ALLIED ELECTRICAL WORKS AT INDIAN BANK, HEAD OFFICE BUILDING, NO: 66, RAJAJI SALAI, CHENNAI 600 001.

PRICE BID

Sr No	Description	Qty	Unit	Supply (in Rs)		Installation (in Rs)		Total (Supply + Installation) (in Rs)
				Rate	Amount	Rate	Amount	
1	SITC of 500 KVA, 11 KV, 433 Volts cast resin copper wound transformer with OLTC (On- Load- Tap Changing gear) with other accessories as per the Technical Specifications mentioned in the Tender.	1	No					
2	SITC of 11 KV single VCB panel 630A, 25 ka with copper bus bars, protective relays and other accessories to be coupled to existing 11 KV 4-panel switch board including all interconnections & accessories as per the Technical Specifications mentioned in the Tender.	1	No					
3	SITC of 11 KV 3x185 Sqmm Aluminium armoured XLPE cable for eathed system to be laid between the newly erected 11 KV panel and 500 KVA transformer	20	Mt					
4	SITC of 11 KV end termination with heat shrinkable cable termination kit with all accessories for Transformer & VCB ends with all accessories.	2	No					

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5	<p>SITC of floor mounting cubicle type LT panel as per technical specifications and provided with following Bus bar chamber fitted with 800A TPN copper bus bars, PVC sleeved and colour coded, supported on SMC (Current density of 1.2 A/Sqmm) shall be considered) 1 no incomer feeder equipped with 1 no 800A 4P ACB, 50 Ka, manual draw out with built in microprocessor based releases for over current, short circuit and earth fault protection, 3 no copper wound resin cast CTs of ratio 800/5A for metering, 3 no copper wound resin cast CT for APFC sensing, LED type RYB indication lamps 1 no microprocessor based muti function meter and other accessories 1 no incomer from DG panel equipped with 630A 4P MCCB, 50 KA with built in thermal overload and magnetic short circuit protections, 3 nos copper wound resin cast CTs of ratio 630/5A for metering , LED type RYB indication lamps, microprocessor based multi function meter and front operating handle for the MCCB Both transformer incomer and DG incomer breakers will be manually interlocked with 2-lock and one key system : Outgoing: 3 no 250A ,6 no 125A and 2 no 400A TP MCCB,50 KA with built in thermal over load and magnetic short circuit releases and front operating handle as outgoing feeders The bottom chamber will have 25x6mm copper earth bus.</p>	1	no					

Sr No	Description	Qty	Unit	Supply (in Rs)		Installation (in Rs)		Total (Supply + Installation) (in Rs)
6	SITC 150 KVAR APFCR panel floor mounting cubicle type equipped with following 400A TPN copper bus bar, PVC sleeved and colour coded and supported by SMC 1 no incomer feeder equipped with 1 no 400A TP MCCB, 25 Ka with built in thermal over load and magnetic short circuit protection release and front operating handle LED type RYB indication lamps protected with MCB 1 no 8-stage microprocessor based automatic power factor correction relay: Outgoing feeders: 1) 4 nos feeders each equipped with 1 no 33.1 KVAR MPPH capacitor 525 V, 1 no 25 KVAR, 440 volts copper wound reactor 7% de-tuned, capacitor duty contactor suitable for 25 KVAR,1 no 63A TP MCB, C curve, 10 Ka.2) 2 no feeders each equipped with 1 no 20 KVAR MPPH capacitor 525 V, 1 no 15 KVAR , 440 volts copper wound reactor 7% de- tuned, capacitor duty contactor suitable for 15 KVAR,1 no 32A TP MCB, C curve, 10 Ka. 3) 2 no feeders each equipped with 1 no 13.2 KVAR MPPH capacitor 525 V, 1 no 10 KVAR 440 volts copper wound reactor 7% de-tuned, capacitor duty contactor suitable for 10 KVAR,1 no 20A TP MCB, C curve, 10 Ka. The bottom chamber of the panel will have a continuous earth bar made of 25x3mm copper with provision for connecting to external earth at both ends of the panel.	1	no					
7	Earthing							

Sr No	Description	Qty	Unit	Supply (in Rs)		Installation (in Rs)		Total (Supply + Installation) (in Rs)
7.1	<p>Supply, Installation, testing and commissioning of 600mm x 600mm x 3mm copper plate Fitted with 2nos 25x6 mm copper Flat Rivetted to the plate along with GI pipe electrode 50mm dia 3Mts long,3mm thick as per IS:3043 complete with all accessories like watering Funnel, clamps etc. The same has been installed in a pit 3.5mts deep and filled with alternate layers of charcoal (75kg) salt (75kg) mixed with river sand . A Brick work Masonry shall be constructed of size 450 x 450 x150mm (inner dimension) and cement plastering at both insideand outside walls. A 3mm thick cast iron plate with frame work placedover the chamber. Earth pit is tested with Fall of Potential method and the value written at the top of chamber. GI pipe Make: Jindal, TATA Copper : Highest Purity</p> <p>The Earth Electrode Should be provided only in the presence of Electrical Consultant / Bank Engineer.</p>	4	No					

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7.2	Supply and installation of 17.2mm dia 3 Mt long low carbon steel earth electrode bonded with 250 micron copper with GI clamp to be installed in a suitable bore and filled with 50 Lbs of carbon bond environment friendly back filling compound. An RCC trough of size 300x300mm shall be provided with RCC cover for protecting the electrode. Note: The job includes submitting test report of resistance of the new earth pit.	4	No					
8	Earth Strips							
8.1	Supply and installation of 25x6mm copper tape to be run cable trench, burried underground from earthing stations to body and neutral earth of transformer	100	Mt					
8.2	Supply and installation of 25x3mm copper tape to be clamped on wall etc for earthing of LT panel and APFC panel. The earth strip to be connected to existing earth mat	75	Mt					
9	Safety items							
9.1	Supply and installation of 1000mm wide, 2000mm length, 2.5mm thick PVC mat with 22 KV proof and 45 KV dielectric as per IS-15652-2006 for laying in front of 11 KVVCB panel and for transformer	3	No					

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9.2	Supply and installation of 1000mm wide, 2000mm length, 2.0mm thick PVC mat with 22 KV proof and 45 KV dielectric as per IS-15652-2006 for laying in front of LT panel and APFC panel	2	No			
9.3	Supply and installation of 2.5 KG capacity dry powder type fire extinguisher for sub station	2	No			
9.4	Shock treatment chart framed and mounted on wall	1	No			
9.5	Danger board of standard size to be fixed 11 KV equipments	2	No			
9.6	Supply of rubber gloves tested for 2 KV along with its box and filled with chalk powder	1	No			
10	Supply and laying of 1.1 KV grade aluminium armoured XLPE cable in the cable tray, trench etc					
10.1	3.5C 400 Sqmm from transformer to LT panel	60	Mt			
10.2	3.5C 240 Sqmm from LT panel to APFC panel	15	Mt			
10.3	3.5C 240 Sqmm from LT panel to Floor panel (To be executed based on approval from Bank)	80	Mt			
10.4	3.5C 300 Sqmm from DG panel to LT panel	180	Mt			
10.5	7Cx2.5 Sqmm copper cable from LT panel to APFC panel	15	Mt			

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10.6	12Cx2.5 Sqmm copper from OLTC to RTCC	15	Mt			
10.7	10Cx2.5 Sqmm copper cable from Transformer marshalling box to 11 KV VCB panel	30	Mt			
11	Termination of above cables with double compression brass cable glands and copper crimping sockets. The work also includes earthing of cable gland with copper ring and connecting same to earth grid with 14 SWG copper wire					
11.1	3.5x400 Sqmm	6	No			
11.2	3.5x300 Sqmm	6	No			
11.3	3.5x240 Sqmm	6	No			
11.4	3.5x240 Sqmm	2	No			
11.5	7x2.5 Sqmm	2	No			
11.6	10x2.5 Sqmm	4	No			
11.7	12x2.5 Sqmm	2	No			
12	Cable tray					

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12.1	Supply and installation of 600mm wide 50mm high 2mm thick GI perforated cable tray to be suspended from ceiling with GI angle iron supports	70	Mt					
12.2	Supply, fabrication and installation of angle iron supports for cable tray including painting of the supports	200	Kg					
13	Civil works							
13.1	Supply and installation of 600mm/450mm wide 6mm thick chequered MS plate to cover the existing cable trenches	40	Mt					
13.2	Breaking of 8 Mt high 7.5 Mt long brick wall (with removal of debris), removal of wire mesh panels fixed on top of wall etc and carryout levelling arrangements /finishing plastering as identified by Bank etc	1	Job					
13.3	Extending the 11 KV cable trench from existing trench to the transformer and LT cable trench from transformer to LT panel, both made of cement concrete, finishing etc from back side of RMG to Transformer to route 11 KV cable from 11 KV switch board to transformer (Depth of trench 1000mm and width 600mm)	10	Mt					
13.4	Removal and handing over the wire mesh fencing near RMG and all items identified by Bank	1	Job					

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14	Statutory approvals					
14.1	Supply and replacement of CTs from the existing 11 KV RMG as per the requirement /Technical Specification of M/s TANGEDCO including the liaisioning charges and getting the MD enhanced as per bank requirements . Diesel charges for running DG set towards shut down work for connecting the new 11 KV VCB in the existing 4 panel VCB ,replacement of CT & PT in the 11 KV RMG& allied shutdown works also to be included.	1	Job			
14.2	Supply and replacement of PTs from the existing 11 KV RMG as per the requirement /Technical Specifications of Tangedco including the liaisioning charges (Optional)	1	Job			
14.3	Submission of as-built drawings, arranging inspection and getting safety certificate from CEA and all mandatory approvals as required by Bank etc.	1	Job			
	Total value of works (excluding GST)					