

New 1600KVA/33KV Transformer HT Sub-Station Work

Sr.No	Descriptions	Approx Qty	Unit	Rate	
				Supply "A"	Installation "B"
1	1600 KVA OIL TYPE OUTDOOR DIST. TRANSFORMER MAKE- KV TRANSPOWER / TRANSDelta/ VOLTAMP				
1.1	Erection , testing & commissioning 1600 KVA-LEVEL-II / 33 /0.433kV with OLTC as Per IS: 1180:2014 OLTC ,Oil type Outdoor Transformer with bottom entry incoming cable box on HV side and Top entry Bus duct/bottom entry outgoing cable box on LV Side with RTCC and all other fixing accessories and as per Specification, approved Drawings, manufacturer's Instructions if any and the direction of Engineer-In-Charge. Scope is inclusive of supply of skilled & unskilled labour with supervision, tools & tackles, hardware and consumables, minor civil work, touch up paint , Transformer Oil Filtration ,IR Value measurement and complete the work in all respects and make it ready for operation to the entire satisfaction of Engineer-In-Charge.	1	Nos		
	The Assembling includes transportation and fixing of all accessories supplied separately and connection of auxiliary circuits testing of transformer assembly with Contractor's own equipment as per specification.				
2	HT METERING KIOSK (IN DOOR)				
2.1	Supply,erection , testing & commissioning outdoor type 33kV, HT Metering Kiosk with necessary CT & PT set suitable for demand load and including necessary nut & bolt etc .The cost shall include HT TVM unit test terminals block. located inside the meter box indoor and cables from CT & PT Sets .The cable should be PVC 4Cx4/2.5 sqmm multistandard copper cables.CT PT units should be duly tested for calibration and Class 0.2S Class accuracy as per MSEDCL Load Sanction and earthed by mens of 50x6mm GI Flats jointing with nearest earth grid avaiable in metering yard .The above shall be as per MSEDCL Norms . Current Transformer - Rated System Voltage:- 33KV Frequency: 50 HZ Ratio: /5A IS:16227 STC Rating:- 13.1 For 1 Sec HSV/Insulation level:- 36/70/170KV Rated Burden: 10VA Class: 0.2s Voltage Transformer- Rated System Voltage: 33000 Volts Frequency: 50 HZ IS 16227 Ratio: 33000√3/110√3 Volts Single Phase Connection Rated Burden: 50 VA Per Phase Class: 0.2	1	Nos		
2.2	Supply of AMR Modem 4G Compitible for Meter With Cable	1	Nos		
3	33KV HT SINGLE MODULE VCB PANEL				
3.1	Installation, Testing & Commissioning of 33 kV, 3Phase, 50 Hz, 1250A, ABB / LK make 1 IC/ 2 OG Vacuum Circuit Breaker (VCB) Panel of Outdoor type, totally enclosed free standing MS sheet clad cubicle type, Isolation type, HT Panel of siemens grey or of approved color 1250A TP PVC sleeved copper bus bars The VCB Panel shall comply to the requirements of EB. The tripping mechanism shall be suitable for 110V DC source & 230V AC source for spring charge & heater circuit. Panel should be consist of bucholz relay & other necessary Transformer Protections relay,VCB - ABB / PCE make.	2	Nos		
4	H.T. CABLE & TERMINATION				
4.1	Supplying , erecting & terminating XLPE insulated, galvanised steel formed wire armoured (strip) cable 33 kV(E), 3 x 300 sq. mm. aluminium conductor laid in provided trench / pipe, as per MSEDCL standard and recommendation	600	Mtr		
4.2	Providing and erecting Heat shrinkable indoor termination kit for 33 kV XLPE HT cable 3x1300 sq.mm.	7	Nos		
4.3	Providing and erecting Heat shrinkable outdoor termination kit for 33 kV XLPE HT cable 3x 300 sq. mm.	1	Nos		
5	CIVIL WORKS FOR OUTDOOR CABLE LAYING :				
5.1	Supply and installation (including excavation not less than 2m) of precast RCC"U" drain with Lid, Size (WxD) - 500 mm x 200mm, Grade-M30, with proper fixing complete, as per MSEDCL standard and recommendation	250	Mtr		

5.2	Supplying & laying (including excavation not less than 2 mtr) reinforced cement concrete pipe of IS 458:2003 NP-2 class of 250 mm internal diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	60	Mtr		
	OR FOR 5.1 and 5.2				
5.3	Supplying & laying (including excavation not less than 2 mtr) reinforced cement concrete pipe of IS 458:2003 NP-2 class of 250 mm internal diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	250	Mtr		
6	33KV ISOLATOR STRUCTURE				
6.1	Supply and installation of DP structure with 6 M RSJ pole with LA, With 33KV Isolator Without EB, clamps, channels, nut bolts etc complete with silver paint including earthing suitable for 33KV metering cubicle incomer isolation, as per MSEDCL standard and recommendation	1	Nos		
7	EARTHING STATION				
7.1	Supplying, installation and testing of maintenance free earthing comprising of Electrode of 17.2 mm diameter Low Carbon Steel with 250 micron molecular copper bonded earthing rod of Length 3m along with 25 kg Carbon based environment friendly back fill ground enhancing compound required to fill up the excavated earth with required quantity complete, and recording the results with chamber and cover	30	Nos		
7.2	Supplying and erecting copper strip of high purity required size used for earthing with necessary copper clamps painted with bituminous paint with joints required, as per MSEDCL standard and recommendation	250	Kg		
7.3	Supplying and erecting GI strip of high purity required size used for earthing with necessary GI clamps fixed on wall painted with bituminous paint with joints required, as per MSEDCL standard and recommendation	500	Kg		
8	LV CABLES & END TERMINATION				
8.1	Supply, Laying of 2.5 Sq.mm X 4 C Cu Arm Cable - Polycab Make	100	Mtr		
8.2	Supply, Laying of 2.5 Sq.mm X 19 C Cu Arm Cable -Polycab Make	100	Mtr		
8.3	Supply, Fixing of 2.5 Sq.mm X 4 C Cu Arm Cable End Termination	10	Nos		
8.4	Supply, Fixing of 2.5 Sq.mm X 19 C Cu Arm Cable End Termination	10	Nos		
9	MISCELLANEOUS WORKS :				
9.1	Supply & Erection of 33 kV Danger boards, as per MSEDCL requirement	10	Nos		
9.2	Supply, Applying of Silver Aluminium Painting for HT Yard & Spreading Metal Stone Spreading in HT Yard & TR yard	1	Job		
9.3	MS Fabrication- Angle, Channel, Square bar Etc	250	Kg		
9.4	supply and providing of 33 KV grade hand gloves set with chalk powder including suitable weather proof transparent box with lock and key	2	Pair		
9.5	Supplying & Erection/fixing of Rubber mats of 33 KV grade Electromat and of sufficient thickness as required by the CEIG Maharashtra and confirming to IS 15652 (2006).Test reports shall accompany supply. Mat shall be installed to the entire satisfaction of Engineer-In-Charge	10	Sq.mtr		
9.6	Supply Fire bucket (03 Nos) with stand for HT yard & TR yard substation	2	Nos		
9.7	Supply and providing of First Aid Box as per IS standard along Supply of Shock treatment chart with teak wood frame and glass cover.	2	Nos		
10	FENCING & SHED				
10.1	HT Yard Supply & Erection of GI Chain Link Box Fencing with Material and two entry gate, and stair for both HT yard gate, connected with proper channel, Angle. (As per user requirement and given drawing, photos) (50 sq.mtr)	1	Job		
10.2	Supply & Erection of Wall Required for GI Fencing Civil Work with material and plaster for HT yard-I (As per user requirement) (4 Feet - Underground 2 feet & overground 2 feet).	1	Job		
10.3	HT Yard Supply & Erection of HT yard shed with all necessary requirements, foundation, MS pillar, channel etc. (As per user requirement)	1	Job		
11	CIVIL FOUNDATION PLINTH				

11.1	Isolator 33kv, Irrection of Civil Work for Isolator Plinth with material as per MSEDCL norms with all necessary accessories. (Note - The plinth shall be constructed on the basis of soil and A concrete PCC slab with reinforcement bars and Anchor fastner.)	1	Nos		
11.2	Plinth of Civil Work for 11C/2OG VCB with material as per MSEDCL norms and given drawing. (Note - The plinth shall be constructed on the basis of soil and A concrete PCC slab with reinforcement bars.)	2	Nos		
11.3	Plinth of Civil Work for 1600 kVA,33 kV/430 V Distribution Transformer Plinth with material and slab as per MSEDCL norms and given drawing with all necessary material. (Note - The plinth shall be constructed on the basis of soil and A concrete PCC slab with reinforcement bars.)	3	Nos		
11.4	Supply & Sreading Metal Stone Spreading in HT Yard & TR yard	6	Brass		
12	DG SET				
12.1	DG Set : Installation, testing & commissioning of outdoor type 750 KVA, DG Set with standard accessories etc.as specified in the technical specifications. The plinth for the DG set will be provided by the client & contractor shall provide the drawing of the plinth to the client for the construction of the same well in advance of the arrival of the DG set at site.	2	Nos		
12.2	Installation,Testing and Commissioning of Microprocessor basedAMF and Synchronization Panel for 2Nos of 750 Kva DG SETs OR for 12.1 and 12.2				
12.3	Installation,Testing and Commissioning of Integrated unit comprising of 2 Nos of 750 KVA DG SETs and Microprocessor basedAMF and Synchronization Panel for 2Nos of 750 Kva DG SETs				
12.4	Supply, erection of integrated exhaust pipe suitable for high temperature flu gases for 750 KVA DG set extended up to 10 m (or as per EI and MPCB norms) duly insulated with 50 mm thick glass wool with 1.0 mm thick aluminium sheet cladding, instruments and protection as per standard specification, civil foundation structure, complete	1	Job		
	CEIG APPROVAL :				
13	Liasoning with MSEDCL, Electrical inspector and other government agencies required to accomplished the work in all respect with drawing preparation, estimate, sanction, permission etc for shifting of 33 KV point of supply, new substation, DG sets existing 500 KVA, new 750 KVA and exhaust line, new 1600 KVA Sub-Station etc complete	1	Job		

TOTAL A + B
9% SGST
9% CGST
TOTAL AMOUNT

Sign & Stamp of Contractor