

: ANNEXURE - A

(A)	DG set (portable three phase 415V 10 KVA Honda / Kirlosakar make)	1 set
-----	--	-------

: ANNEXURE - B

Testing and Maintenance Equipments		
Sr. No.	Particulars of Item	Supply Qty.
1	AIO Computer (Non touch) <u>from following make & model</u> with UPS <u>HP Make : Model 240 G9</u> <u>Dell Make : Model OptiPlex 7400 AIO</u> <u>ACER make: Model Verizon Z4694G</u>	1
2	A-4 size mono lasor printer <u>from following make & model</u> <u>HP Make : Model LaserJet 1505/1020 Plus</u> <u>Canon Make : Model LBP 2900B</u> <u>Samsung Make : ML1676P</u>	1
3	Digital Earth Resistance Tester with <u>all required accessories from following make & model</u> <u>Megger make: DET3TC with clamp,</u> <u>Motwane make: DECT2</u> <u>Taurus make: ET 46D</u>	1
4	Clamp on meter with all <u>required accessories from following make and model</u> <u>Motwane Make : Model DCMA45A</u> <u>Rishabh Make : Model 300A</u> <u>Kyoritsu Make : Model KEW2127R</u> <u>Kusum Meco Make : 27 Auto</u> <u>Megger make: DCM340/1500</u>	1
5	Insulation Resistance Tester (Test volt upto 10kv Range 10Kohm to 20T ohm), <u>Megger: 10 KV Model: S1-1068 &</u> <u>Sonel:- 10kv Model : MIC10k1</u>	1
6	Tan Delta Kit with all required accessories from following make & model. <u>Doble Make : Model-M4100</u> <u>Megger Make : Delta-4110</u> <u>ISA Make : TDX5000</u> <u>RAytec make: Capo12</u> Along with Notebook PC of HP Probook 4440 / LENOVO Thinkpad X series / DELL Vostro series as per GETCO specification and suitable to kit.	1
7	LCM Kit <u>from following make & model with all required accessories suitable to kit</u> Doble Make : Model LCM 500 (wire less) Scope Make: SA30i+ , (wire less)	1
8	Oil BDV testing Kit with measuring gauge <u>(GO & NO-GO)</u> as per IS <u>from following make and model.</u> <u>Megger make : Model OTS100AF</u> <u>BAUR make : Model DTA100C</u> <u>Motwane make : Model OTS100A</u>	1

9	Three Phase Winding resistance meter 3- phase Measurement of same voltage class without changing the connection with all required accessories Confirmed by GETCO <u>SCOPE MAKE- Model TRM 25+</u> <u>VANGUARD MAKE - Model TRM 203</u>	1
10	Three Phase Transformer Turn Ratio TTR kit can capable to measure the 1& 3phase Delta,Star connected X'mer, Power X'mers, CT,PT with phase angle deviation, Excitation current, %deviation ratio. With all required accessories confirmed by GETCO <u>SCOPE MAKE- Model TTRM 302</u> <u>VANGUARD MAKE - Model ATRT 03S2</u> <u>MOTWANE MAKE- Model XTRM3</u>	1
11	Contact Resistance measurement kit (CRM) Kit can reliably measure the contact Resistance of Circuit breakers, Isolators, under the high electrostatic noise found in live switchyard upto 400kv and display the results in Micro Ohm with all required accessories and Technical parameters confirmed with GETCO <u>SCOPE MAKE - Model CRM 100B+</u> <u>MOTWANEMAKE- Model PCRM 100S</u> <u>CREST MAKE- Model MVT 100B+</u>	1
12	Circuit Breaker Timing kit Kit can measure the circuit breaker timing in live switchyard upto 400kv with all required accessories & Technical parameters confirmed with GETCO. <u>SCOPE MAKE - SCOT M3k+</u> <u>CREST MAKE- Model MVT SC1500</u>	1
13	Battery Impedance Kit with all required accessories <u>Megger Make - BIT 5</u>	1
14	Under Ground Route Tracer with all required accessories Magtrak make: - MT 30 Raycom with 10W Transmitter & receiver, Both Rechargeable batteries pack , Batteries charger , Direct connection Lead, Earthing Rod, Soft Carry Bag , Clamp with all required accessories Merytronics make: MRT 700 with 10W Transmitter, receiver, both rechargeable battery, direct connection cables with crocodile connectors , inductive clamp, charger and all required accessories Radiodetection make: RD8200 with 10 W Transmitter, receiver, clamp, both battery pack (li-iron) charger & all required accessories. Stanlay make: ST Loc 10 with 10W Transmitter, receiver, Both battery pack, with charger, flexible clamp, & all other required accessories.	1
15	Thermal Imaging camera with add photo lens <u>Make: Fluke, Model no: Txi 580</u> <u>Make: Flir, Model no: E96</u> <u>Make: Testo Model no. 890</u>	1

ANNEXURE - C

Tools and Tackles

	Tools and Tackles (General)	
1	Earthing Rod (Highly insulated FRP telescopic Earthing/ Discharge Rod. with cable suitable for 220kV and 66kV Switchyard- National Make	18 Nos
2	Spanner (Ring, Fixed, Box) Fix=10x11,12x13,14x15,,16x17Ring=10x11,12x13,14x15,16x17 Tubular=12x13,14x15,16x17,18x19 Screw driver=827I,927 Nut driver= 7mm - Taparia/Gedore/Zalani Make	3 Set
3	Steel Roller -Size 1 inch	Page 10 of 10s
4	Aluminium Roller -Size 4 inch	5 Nos

5	One/two/three Wheel pulley -Size 1 inch (Gadore)	2 Nos
6	Winch Machine with Handle -05 Ton Capacity	2 Nos
7	Hydraulic Press Machine with Dog, panther, zebra and moose dye sets--100 Ton Capacity (Hydraulic force ent. / Techno spent)	2 Nos
8	Hand drill Wolf Make 240 V Capacity :-Hole up to 31 mm , Single Phase	1 No
9	Drill Machine -5/8 inch Dia Wolf Make Standing Drill machine having 3 Feet Pillar and suitable for making Holes up to ¾". Motor	2 Nos
10	Chain pulley block -5 tonne capacity (Morries)	2 Nos
11	Wire rope pulley block -02 Tonne (Morries)	1 Set
12	Water pump (Crompton Make) Set -5 HP with hose pipe of 30 m Crompton Make	2 Nos
13	Crowbar -1.5 Mtr	5 Nos
14	Crowbar -1.0 Mtr	5 Nos
15	Hammer with wooden handle -10Kg	1 No
16	Pickaxe (Trikam) -2 inch width with handle	5 Nos
17	Pawda(shovel) -12 inch width with handle	5 Nos
18	Axe (Kuhadi) with handle	5 Nos
19	Sythe (Dharia) with handle	10 Nos
20	Tar Poline (Tad Patri) 5X5 m (HDPE), 200 GSM	5 Nos
21	Nylon Rope -0.5 inch Dia -100 mtrs (Garware Make)	1 Set
22	Nylon Rope 0.75 inch Dia -100 mtrs (Garware Make)	1 Set
23	Nylon Rope -1 inch Dia -100 mtrs (Garware Make)	1 Set
24	Aluminium Ladder -15 ft. Aluminium folding factory ladder (Heavy duty) made from high tensile aluminium alloy design no 152 AFFL 15 Ft height (4.56 mtrs) specification section= 15/8" X 1.1/4" Steps= 15/8 X 1.1/4 12"Center to Center	1 Set
25	Telescopic aluminium ladder(3 sections) with platform -25 ft	1 No
26	Hot air blower (Wolf Make)	
	Small Capacity =1.5m3/min,	1 No
	Big Capacity =2.0m3/min	1 No
27	Vaccum cleaner -Eureka Forbes Make (Industrial)	1 No
	Safety Tools	
1	Helmet with ISI mark of reputed make	10 Nos
2	Hand Gloves of quality as per IS certification 4770 and test potential 7500Volt	6 Sets
3	Gum boot (Pair) -Size 8,9,10. -Standard make	3 Set (Pair for each size)
	Display Boards and others	
1	Single line diagram drawn with radium paint on a board of approx size of 1200x900 mm with fixing arrangement on control room wall.	2 Set
2	Key board with hook for different keys of each equipments/panels/cubicles with SLD drawn with color approx size 2 Feetx2 Feet	1 Set

Annexure- D
Supply of Furniture, RO Water Filter System, Water Cooler Etc.

Sr. No.	Particulars	Quantity
1	Furniture for 220KV S/S	
	a) Cushioned chair of Godrej make no. Ch-1018D	6
	b) Steel rack of size 30 inchX36 inchX15 inch with three partitions, prepared 20 gauges	2
	c) Providing Control Room Table modular 5X5 Panta work surface with pedestal CPU Trolley and Key Board tray of Godrej or equivalent	1
	d) Office table with SDU and pedestal 5026 Godrej make	2
	e) Modular workstations of Godrej make or equivalent 4X2 Panta work surface with pedestal CPU trolley and keyboard Tray or equivalent	2
	f) Revolving chair PCH -5D02-STAR R-MID BACK	5
	g) Three seater perforated chair with powder coating(Bench)	3
2	RO water filter system 25Ltr. Capacity	1
3	Water Cooler Providing and installing SHRIRAM USHA or equivalent make water cooler of 40Ltr./hr. capacity suitable to operate on 230V+10percentage , 50Hz. Single phase AC supply with hermetically sealed type suction cooled compressor with overload protection confirming to IS 106	1