

**420kV GIS- SPARE PARTS**

ITEM	CUSTOMER DESCRIPTION	QTY	UNIT	AREVA DESCRIPTION	REFERENCE NO	QTY	UNIT	REMARKS
<b>A</b>	<b>SPARE PARTS FOR HV EQUIPMENTS</b>							
1	SF6/Air Out door Bushing, complete with gaskets and connection	2	Nos	COMPOSITE AIR-BUSHING + CORONA SHIELD	F53U50Z003-10	2	Nos	
2	420kV 2000A Circuit Breaker interrupting heads,complete with all necessary appratus	1	Nos	---	---	---	---	Not applicable
3	420kV 800A Circuit Breaker interrupting heads,complete with all necessary appratus	1	Nos	---	---	---	---	Not applicable
4	420kV 4000A Circuit Breaker interrupting heads,complete with all necessary appratus	3	Nos	Circuit Breaker complete Pole T155	F52U07Z105-00	3	Nos	
5	420kV 2000A Circuit Breaker Operating Mechanisms, complete with all necessary appratus	2	Nos	Operating Mechanism CB T155,FK 3-12	F52S14Z101-00	2	Nos	
6	420kV 800A Circuit Breaker Operating Mechanisms, complete with all necessary appratus	1	Nos	---	---	---	---	Not applicable
7	420kV, 2000A isolator switch internal parts, complete with all necessary gaskets mounting hardware etc	1	Set	---	---	---	---	Not applicable
8	420kV, 2000A isolator switch Operating Mechanism	1	Set	---	---	---	---	Not applicable
9	420kV, 800A isolator switch Operating Mechanism	1	Set	---	---	---	---	Not applicable
10	420kV, 800A isolator switch internal parts, complete with all necessary gaskets mounting hardware etc	1	Set	---	---	---	---	Not applicable
11	420kV, 4000A isolator switch internal parts, complete with all necessary gaskets mounting hardware etc	3	Set	Disconnecter drive inlet (Single Pole)	F53S11Z106-00	3	Nos	
12	420kV, 4000A isolator switch Operating Mechanism , complete with all necessary gaskets mounting hardware etc	3	Set	Operating Rod	F53S16Z101-00	3	Nos	
				Operating Mechanism for Disconnecter	GD53A140009-01	3	Nos	
13	420kV, 4000A Safety grounding switch internal parts, complete with all necessary gaskets mounting hardware etc	1	Set	Earthing Switch drive (Single Pole)	F53S12Z120-00	3	Nos	
14	420kV, 4000A Safety grounding switch Operating Mechanism , complete with all necessary gaskets mounting hardware etc	1	Set	Operating Rod	F53S16Z101-00	3	Nos	
				Operating Mechanism for Earthing Switch	GD53A140009-03	3	Nos	
15	(420kV/v3) / (110V/v3, 110V/v3 110V/v3) VT Core, complete with all necessary gaskets mounting hardware etc	1	Set	VT Complete Assembly	GD53A600007-01	1	Nos	

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16	420kV Current transformer cores , set to comprise one core of each ratio, burden and accuracy used in equipment	1	Set	F1 Type core (GD027)	GD53A30000901	1	No	
				N2 Type core (GD027)	GD53A30000902	1	No	
				F3 Type core (GD027)	GD53A30000903	1	No	
				F4 Type core (GD027)	GD53A30000904	1	No	
				F5 Type core (GD027)	GD53A30000905	1	No	
				F6 Type core (GD027)	GD53A30000906	1	No	
				N7 Type core (GD027)	GD53A30000907	1	No	
				F8 Type core (GD027)	GD53A30000908	1	No	
17	336kV , Single Phase Station class gas insulated gap less surge arrester	2	Nos	1 Phase Surege Arrester	F53U65Z003-00	2	Nos	
18	Gas monitoring devices complete with all necessary fittings, gaskets & switches	3	Nos	Density Switch Monitoring	F53S23Z002-05	3	Nos	
23	Inspection windows	3	Set	Viewver Window Assembly	F53S11Z001-01	3	Nos	
24	Sheer pins	100	Set	FLANGE/COUNTER FLANGE PIN	F53P90Z801-01	100	Nos	
25	420 kV circuit breaker closing coils	100	Set	Tripping/Closing Coil 220-250 VDC	H4910210123	100	Nos	
26	420 kV circuit breaker trip coils	200	Set	Tripping/Closing Coil 220-250 VDC	H4910210123	200	Nos	
27	Spare parts for SF6 gas processing unit	1	Set	Tarpaulin 6-170KA-R001	---	1	No	
				5m Long rubber hose DN20 with Coupling torque part DN20 on both end	6-1017-R050	1	No	
				10m Long rubber hose DN20 with Coupling torque part DN20 on both end	6-1017-R100	1	No	

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<b>A</b>	<b>SPARE PARTS FOR HV EQUIPMENTS</b>							
29	Spare auxiliary contacts for isolator switches and grounding switches	1	Set	Auxiliary Switch CS16	H4910395501			
30	420 kV high speed fault making switch internal parts complete with all necessary gaskets, mounting hardware etc	1	Set	High Speed Earthing Switch drive (Single Pole)	F53S12Z121-00	3	Nos	
31	420 kV high speed fault making grounding switch internal Operating mechanism complete with all necessary connecting equipment	1	Set	Operating Rod	F53S16Z101-00	3	Nos	
				Operating Mechanism for Earthing Switch	GD53A140009-02	3	Nos	

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<b>B</b>	<b>SPARE PARTS FOR LV EQUIPMENTS</b>							
19	Control switches/control relays comprising one switch / relay of each type and rating used in the control cubicles	1	Set	L/R SELECTOR SWITCH (KEY REMOVAL AT REMOVAL)	B63-S16/TP16/RT16	1	No	
				PISTAL GRIP SELECTOR SWITCH	2AS2-3PSR	1	No	
				CONTACT BLOCK (1NO)	S1	1	No	
				CONTROL RELAY (2NO+2NC) 240V AC	CS8-22Z-240	1	No	
				CONTROL RELAY (2NO+2NC) 24V DC	CS8C -22Z -24DD	1	No	
				CONTROL RELAY (4NO) 220V DC	CS8C -40E -220D	1	No	
				CONTROL RELAY (2NO+2NC) 220V DC	CS8C -22Z -220D	1	No	
				VARISTOR(137...277V AC/181 -250VDC)	CRV8 -277	2	No	
				AUX.CONTACT BLOCK (4NC)	CS8 - P04E	1	No	
				AUX.CONTACT BLOCK (2NO+2NC)	CS8 - P22Z	1	No	
				INTERVAL TIME RELAY,(2W) 24-240V	3RP15 25-1BW30	1	No	
20	Low voltage circuit breakers, comprising one circuit breaker of each type and rating used in the control equipment	1	Set	MINIATURE CIRCUIT BREAKER(MCB)	S281-B 10 NA	1	No	
				MINIATURE CIRCUIT BREAKER(MCB)	S281-B 16 NA	1	No	
				MINIATURE CIRCUIT BREAKER(MCB)	S282 UC-B 6	1	No	
				MINIATURE CIRCUIT BREAKER(MCB)	S282 UC-K 2	1	No	
				MINIATURE CIRCUIT BREAKER(MCB)	S282 UC-K 10	1	No	
				AUXILIARY SWITCH (2NC)	S 2-H 02	1	No	
				AUXILIARY SWITCH (1NO+1NC)	S 2-H 11	1	No	
21	Control circuit fuses, each set to comprise one of each type and rating of control circuit fuse used on the equipment	10	Sets	Not Applicable	---	---	---	

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<b>B</b>	<b>SPARE PARTS FOR LV EQUIPMENTS</b>							
22	LEDs, each set to comprise one of each type and rating used on the equipment	10	Set	LED POSITION INDICATOR,ROUND, 220V DC	NS122 R-S22(ROUND	10	Nos	LV Items
				LED POSITION INDICATOR,SQUARE, 220V DC	NS122 R-S22(SQUAR	10	Nos	
28	Cards, contactors and auxiliary relays in local control cubicles	20% of each		CONTOL RELAY (2NO+2NC) 240V AC	CS8-22Z-240	1	No	
				CONTOL RELAY (2NO+2NC) 24V DC	CS8C -22Z -24DD	3	No	
				CONTOL RELAY (4NO) 220V DC	CS8C -40E -220D	10	No	
				CONTOL RELAY (2NO+2NC) 220V DC	CS8C -22Z -220D	3	No	
				VARISTOR(137...277V AC/181 -250VDC)	CRV8 -277	13	No	
				AUX.CONTACT BLOCK (4NC)	CS8 - P04E	2	No	
				AUX.CONTACT BLOCK (2NO+2NC)	CS8 - P22Z	6	No	
				INTERVAL TIME RELAY,(2W) 24-240V	3RP15 25-1BW30	1	No	