

**SPARES & SPECIAL TOOLS****Project 66kV SWITCHYARD FOR NIMOO-BAZGO HEP, J&K**

<b>1.0</b>	<b>Spares</b>		
1.1	60kV Surge Arrestors (Same as item no. 5 except structure and terminal connector)	Nos	2
1.2	Current Transformer (Same as item no. 2 except structure & terminal connector)	Nos.	2
1.3	Capacitor Voltage Transformer (same as item no. 3 except structure & terminal connector)	Nos.	2
1.4	Insulator Disc	Nos.	120
1.5	Zebra conductor	mtrs	200
1.6	Hardware, fittings and fastners of each type used	Nos	10
1.7	Connector of High Voltage Conductors of each type	Nos	10
1.8	Vacuum Bottles for 6 poles	Lot	1
1.9	Breaker operating Mechanism	No.	1
1.10	Interruptor unit	No.	3
1.11	Complete drive mechanism for disconnector switches and earthing switches		
1.11.1	For isolator	Nos	1
1.11.2	For earth switch	Nos	1
1.12	Support insulator for one complete isolator pole	Nos	3
1.13	Moving and fixed contact full assembly over insulator	Nos	2
1.14	Operating Rod for tenadem Isolators	Nos	2
1.15	Trip Coils for circuit Breakers	Nos	6
1.16	Closing coil for circuit Breaker	Nos	6
1.17	Power supply module for PLCC panels of each type used	Nos	2
1.18	Power supply module for telephone exchange of each type used	Nos	1
1.19	Other cards used in PLCC panels of each type	Nos	2
1.20	Modem	Nos	1
1.21	Other cards used in telephone exchanges of each type	Nos	1
1.22	4 Wire telephone for direct voide communications	Nos	1
1.23	Other cards used in telephone exchanges of each type	Nos	0
1.24	Cable sealing end arrangement for use at switchyard terminal complete with gasket for 66kV Cables	Nos	1
1.25	Cable sealing end arrangement for use at transformer terminal complete with gasket for 66kV Cables	Nos	1
1.26	Link Boxes ( Single Phase) (66kV Cables)	Nos	2
1.27	Sheath Voltage Limiteer (66kv Cables)	Nos	3
1.28	Cable Straight Joints (66kv Cables)	Nos	2
1.29	MCCB of Type used	Nos.	8
1.30	Current transformer of type used	Nos.	4
1.31	Supporting insulator of type used	Nos.	6
1.32	Bushing of type used	No.	1
1.33	Indicatio lamps used including assemblies	Nos.	10
1.34	Fuses	Nos.	10
1.35	Control and instrumentation switches	Nos.	3
1.36	Contactors	Nos.	2
1.37	Indicating instruments	No.	2
1.38	415 V, terminal bushing	Nos.	4
1.39	Under voltage relays	Nos.	2
1.40	Over current and E/F relays	Nos.	2

## ANNEXURE-A

<b>2.00</b>	<b>Special Tools</b>		
2.1	SF6 gas filling and evacuating equipment	Set	1
2.2	SF6 gas leakage detectors	Nos	1
2.3	SF6 gas filtering, drying, storage and recycling plant.	Nos	1
2.4	Operational Analyser	Nos	1
2.5	Two(2) sets of cards / module extraction tools	Lot	1
2.6	Level meter with level oscillator: frequency 50Hz to 500kHz	Nos	1
2.7	Telescopic Extension Piece type earthing rod	Nos	2
2.8	Aluminum Channel ladder with wheels and platforms suitable for two persons alongwith tools for first level of switchayrd.(10.5/5.5 meter busbars)	Nos	2
<b>Note</b>			
1	Scope for spare items shall include handing over to customer.		