

Substation Package for Extension of 400kV Tumkur Pooling station (Pavagada) (including transformer & Reactor), Extension of 400/220kV Mysore Substation and Extension of 400/220kV Tumkur (Vasantnarsapur) (Including Transformer) under Transmission System for Ultra Megar Solar Power Park (2000MW) at Tumkur (Pavagada), Karnataka-Phase-II (Part -A)

Mandatory Spares - 400 KV TUMKUR (Vasantnarsapur) EXTN

Sl. No.	Activity Description	Item Description	Unit	Qty.
		ICT AT TUMKUR (VASANTNARSAPUR)		
198	Mandatory Spares ICT	Oil cooler pump with motor for 400kV Transformer	SET	1
199	Mandatory Spares ICT	Buchholz Relay (Main Tank) complete with float and contacts for Transformer	SET	1
200	Mandatory Spares ICT	Local winding temperature indicator (WTI) with contact	EA	1
201	Mandatory Spares ICT	Remote winding temperature indicator (WTI) with sensing device and matching unit	EA	1
202	Mandatory Spares ICT	Magnetic Oil Level Gauge	EA	1
203	Mandatory Spares ICT	Cooler fan with motor for 400kV Transformer	EA	1
204	Mandatory Spares ICT	Starters, contactors, switches and relays for electrical control panels of 765kV T/F (one set of each type)	SET	1
205	Mandatory Spares ICT	Remote tap position indicator for 400kV Transformer	EA	1
206	Mandatory Spares ICT	Oil flow indicator for 400kV T/F with flow switch	SET	1
207	Mandatory Spares ICT	245KV, 2000A RIP BUSHING WITH METAL PARTS AND GASKETS	EA	1
208	Mandatory Spares ICT	52kV, 3150A Bushing with metal parts and gaskets	EA	1
209	Mandatory Spares ICT	SPARES INSULATING OIL TO BE HANDED OVER TO OWNER AFTER COMMISSIONING	KL	10
210	Mandatory Spares ICT	Starters, contactors, switches and relays for electrical control panels of 400kV T/F (one set of each type)	SET	1
211	Mandatory Spares ICT	36kV, 2000A Bushing with metal parts and gaskets for Transformer	EA	1
212	Mandatory Spares ICT	420KV, 1250A RIP BUSHING WITH METAL PARTS AND GASKETS	EA	1
213	MANDATORY SPARE	Open / Close contactor assembly, timers, key interlock push button switch & auxiliary switches for 420kV Isolator	SET	1
214	MANDATORY SPARE	Limit switch for 420kV Isolator	SET	2
215	MANDATORY SPARE	Corona shield rings for 420kV Isolator	SET	3
216	MANDATORY SPARE	Terminal pads & connectors for 420kV Isolator	EA	3
217	MANDATORY SPARE	336kV Surge Arrester (1-phase)	EA	1
218	MANDATORY SPARE	One complete pole of 245kV, 1600A, 40kACB including pole column, interrupter, operating mechanism and Marshalling Box but without support structure	EA	1
219	MANDATORY SPARE	Trip coil with resistor for 245kV Circuit Breaker	EA	2
220	MANDATORY SPARE	Closing coil with resistor for 245kV Circuit Breaker	EA	1
221	MANDATORY SPARE	Terminal pad for 245kV SF6 Circuit Breaker	EA	2
222	MANDATORY SPARE	Terminal Connector Flexible or Expansion Type, 245kV, 1600A, 40kA for 4" IPS AL Tube to Circuit Breaker	EA	2
223	MANDATORY SPARE	Molecular filter for 245kV SF6 Circuit Breaker	EA	2
224	MANDATORY SPARE	CORONA RING FOR 245KV SF6 CIRCUIT BREAKER	EA	1
225	MANDATORY SPARE	Relays, Power contactors, SFU, limit switches, push buttons, timers & MCB etc. (1 No of each type) for 245kV SF6 Circuit Breaker	SET	1
226	MANDATORY SPARE	Pressure Switches (1 no each type) for 245 kV SF6 Circuit Breaker	SET	1
227	MANDATORY SPARE	Aux. Switch assembly for 245kV, SF6 Circuit Breaker	SET	1

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Mandatory Spares - 400 KV TUMKUR (Vasantnarsapur) EXTN

Sl. No.	Activity Description	Item Description	Unit	Qty.
228	MANDATORY SPARE	Rubber gasket, O rings and seals for SF6 gas (complete replacement for one 245kV SF6 Circuit Breaker)	SET	1
229	MANDATORY SPARE	Complete pole for 245kV, 1600 A isolator with 1 earth switch including support Insulator, motor operating mechanism (MOM) with box but excluding structure	EA	1
230	MANDATORY SPARE	Copper contact fingers for female & male contacts of 245kV Double Break Isolator	SET	2
231	MANDATORY SPARE	Open / Close contactor assembly, timers, key interlock push buttons switch & auxiliary switches for 245kV Isolator	SET	1
232	MANDATORY SPARE	Limit switch for 245kV Isolator	SET	2
233	MANDATORY SPARE	Corona shield rings for 245 kV, 250A, 40 KA, 1 E/S isolator	EA	3
234	MANDATORY SPARE	Terminal pads & connectors for 245kV Isolator	EA	3
235	MANDATORY SPARE	TRANSFORMER Protection RELAY Group 1	SET	1
236	MANDATORY SPARE	Restricted earth fault relay type with non-linear resistor and associated software in case of numerical relay	EA	1
237	MANDATORY SPARE	Bay Unit module for Bus Bar Protection	EA	1
238	MANDATORY SPARE	Ethernet switch of each type	SET	1
239	MANDATORY SPARE	Deluge valve (1 No. of each size)	SET	1
240	MANDATORY SPARE	One Complete Pole of Double Break Isolator including support Insulator with 1 E/s (excluding structure) with Motor operating Mechanism for 420kV, 3150A, 50kA main Isolator and E/S	EA	1
241	MANDATORY SPARE	420 kV, 3000A, 50KA, 1-Phase Current Transformer with 120% extended current rating	EA	1
242	MANDATORY SPARE	Trip coil with resistor for 420kV SF6 Circuit Breaker	SET	2
243	MANDATORY SPARE	Closing coil with resistor for 420kV SF6 Circuit Breaker	EA	1
244	MANDATORY SPARE	Terminal pad for 420kV SF6 Circuit Breaker	EA	2
245	MANDATORY SPARE	Molecular filter for 420kV SF6 Circuit Breaker	EA	2
246	MANDATORY SPARE	Corona rings (1 No of each type) for 420 kV Circuit Breaker	SET	1
247	MANDATORY SPARE	Relays, Power contactors, SFU, limit switches, push buttons, timers & MCB etc. (1 No of each type) for 420kV Circuit Breaker	SET	1
248	MANDATORY SPARE	Pressure switches (1 No. of each type) for 420kV SF6 Circuit Breaker	SET	1
249	MANDATORY SPARE	Aux. Switch/contact assembly for 420kV SF6 Circuit Breaker	SET	1
250	MANDATORY SPARE	Rubber gasket, O rings and seals for SF6 gas (complete replacement for one 420kV SF6 Circuit Breaker)	SET	1
251	MANDATORY SPARE	Grading capacitors (if applicable) for 420kV SF6 Circuit Breaker	EA	1
252	MANDATORY SPARE	COPPER CONTACT FINGERS FOR FEMALE & MALE CONTACTS OF 420KV DOUBLE BREAK ISOLATOR	SET	2
253	MANDATORY SPARE	216kV Surge Arrester (1-phase)	EA	1
254	MANDATORY SPARE	ONE POLE OF 420KV, 3150 A, 50KA SF6 CIRCUIT BREAKER INCLUDING GRADING CAPACITOR (IF APPLICABLE), POLE COLUMN INTERRUPTER, WITH DRIVING MECHANISM AND MARSHALING BOX BUT WITHOUT SUPPORT STRUCTURE.	EA	1
255	MANDATORY SPARE	245 kV, 1600A, 40KA, 1-Phase Current Transformer with 120% extended current rating	EA	1