

Annexure-IV_List of the equipment along with quantities which are already supplied / to be supplied from other packages or bulk procurement pertaining to the works due to Re-arrangement in layout of Kurnool-III PS

Sl. No.	LongText	Unit	Total Supply quantity required for deferred scope	Qty of Deferred scope which are already available at site / to be supplied from other packages	Additional Supply quantity required for Deferred scope	Remarks
1	420 kV, 1 phase Bus Post Insulator (except for Line Traps)	EA	18	12	6	12nos.(Make M/s Aditya Birla) are already available at site.
2	336kV Surge Arrester (1-phase)	EA	6	6	0	6nos. (Make M/s CG Power & Industrial Solution) Limited are already available at site.
3	420kV, 3150A, 63KA, Isolator (3-phase)(Double Break) with one E/S	EA	12	12	0	8nos.(Make M/s Switchgears & Structural (India) are already available at site. 4nos. Will be supplied from Bulk procurement / other regional level procurement.
4	420 kV, 3000A, 63KA, 1-Phase CurrentTransformer with 120% extended current rating	EA	12	12	0	9nos. (Make M/s CG Power & Industrial Solution) are already available at site. 3nos. Will be supplied from Bulk procurement / other regional level procurement.
5	420kV, 3150A, 63KA Circuit Breaker (3-Phase) without closing resistor and with Support Structure	EA	2	2	0	2nos. (Make M/s Siemens) are already available at site.
6	420kV, 3150A, 63KA Circuit Breaker (3-Phase) with closing resistor with support structure	EA	2	2	0	1no. (Make M/s Siemens) is already available at site. 1no. Will be supplied from Bulk procurement / other regional level procurement.
7	245 kV ,1 phase Bus Post Insulators for Line Traps	EA	30	30	0	30nos. (Make M/s Aditya Birla)are already available at site.
8	245 kV, 1 phase Bus Post Insulator (except for Line Traps)	EA	90	84	6	84nos.(Make M/s Aditya Birla) are already available at site.
9	216kV Surge Arrester (1-phase)	EA	21	21	0	21nos. (Make M/s CG Power & Industrial Solution) are already available at site.
10	245KV, 1600 A, 50KA, 3-PHASE, DOUBLE BREAK TANDEM ISOLATOR WITHOUT E/S	EA	15	15	0	15nos. .(Make M/s Switchgears & Structural (India) are already available at site.
11	245kV, 1600A, 50 KA, 3-phase DoubleBreak Isolator with two E/S	EA	8	8	0	8nos. .(Make M/s Switchgears & Structural (India) are already available at site.
12	245kV, 1600A, 50 KA, 3-phase DoubleBreak Isolator with one E/S	EA	8	8	0	8nos. .(Make M/s Switchgears & Structural (India) are already available at site.
13	245 kV, 4400pf Capacitive Voltage Transformer (1- Phase)	EA	21	21	0	21nos.(Make M/s GE limited) are already available at site.
14	245 kV, 1600A, 50KA, 1-Phase CurrentTransformer with 120% extended current rating	EA	24	24	0	24nos. (Make M/s CG Power & Industrial Solution) are already available at site.
15	245kV, 1600A, 50KA Circuit Breaker(3-Phase) with support structure	EA	8	8	0	8nos. (Make M/s Siemens Limited) are already available at site.
16	245kV, 3150A, 50KA Circuit Breaker(3-Phase) with support structure	EA	3	3	0	3nos. (Make M/s Siemens Limited) are already available at site.

17	245KV, 3150A, 50KA, 3-PHASE DOUBLE BREAK ISOLATOR WITH ONE E/S	EA	4	4	0	4nos. .(Make M/s Switchgears & Structural (India) are already available at site.
18	245KV, 3150A, 50KA, 3-PHASE DOUBLE BREAK ISOLATOR WITH TWO E/S	EA	2	2	0	2nos. .(Make M/s Switchgears & Structural (India) are already available at site.
19	245 kV, 2500A, 50KA, 1-Phase CurrentTransformer with 150% extended current rating	EA	9	9	0	9nos. (Make M/s Alstom T&D India limited) are already available at site.
20	Erection Hardware for 400kV I type layout-Bus Work (For one diameter) as per technical specification	SET	10	0	10	
21	Erection Hardware for 400kV I type layout-Transformer bay as per technical specification	SET	2	2	0	2 SETs are already available at site.
22	Erection Hardware for 400kV I type layout-Spare bay of half dia as per technical specification	SET	2	0	2	
23	400KV SUSPENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITH DROP CLAMP SUITABLE FOR QUAD CONDUCTOR	EA	12	0	12	
24	400KV TENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITH TURN BUCKLE SUITABLE FOR QUAD CONDUCTOR	EA	42	0	42	
25	400KV TENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITHOUT TURN BUCKLE SUITABLE FOR QUAD CONDUCTOR	EA	42	0	42	
26	Erection Hardware for 220kV layout (Double Main and Transfer Scheme)-Bus work (one Bay) as per technical specification	SET	12	9	3	9 SETs are already available at site.
27	Erection Hardware for 220kV layout (Double Main and Transfer Scheme)-Line Bay as per technical specification	SET	5	5	0	5 SETs are already available at site.
28	Erection Hardware for 220kV layout (Double Main and Transfer Scheme)-Transformer Bay as per technical specification	SET	2	2	0	2 SETs are already available at site.
29	Erection Hardware for 220kV layout (Double Main and Transfer Scheme)-Bus section Bay as per technical specification	SET	2	2	0	2 SETs are already available at site.
30	220KV TENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITH TURN BUCKLE SUITABLE FOR TWIN CONDUCTOR	EA	60	0	60	
31	220KV TENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITH TURN BUCKLE SUITABLE FOR SINGLE CONDUCTOR	EA	5	0	5	
32	220KV TENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITH TURN BUCKLE SUITABLE FOR QUAD CONDUCTOR	EA	20	0	20	
33	220KV TENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITHOUT TURN BUCKLE SUITABLE FOR TWIN CONDUCTOR	EA	60	0	60	
34	220KV TENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITHOUT TURN BUCKLE SUITABLE FOR QUAD CONDUCTOR	EA	20	0	20	
35	220KV SUSPENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITH THROUGH CLAMP SUITABLE FOR TWIN CONDUCTOR	EA	30	0	30	
36	220KV SUSPENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITH DROP CLAMP SUITABLE FOR TWIN CONDUCTOR	EA	25	0	25	
37	220KV SUSPENSION INSULATOR STRING AND ASSOCIATED HARDWARE FITTINGS WITH DROP CLAMP SUITABLE FOR QUAD CONDUCTOR	EA	10	0	10	
38	40 MM MS ROD FOR MAIN EARTH MAT	KM	130	130	0	130KMs Earth rod will be supplied from regional package.
39	400kV Transformer Protection Panel (For both HV & MV side)- (with Automation)	EA	2	2	0	2nos.(M/s Hitachi make) are already available at site.
40	400KV CIRCUIT BREAKER RELAY PANEL (WITH AUTOMATION)	EA	4	3	1	3nos.(M/s Hitachi make) are already available at site.

41	220KV CIRCUIT BREAKER RELAY PANEL (WITH AUTOMATION)	EA	11	11	0	11nos. (M/s Hitachi make) are already available at site.
42	220kV Line Protection Panel (with Automation)	EA	5	5	0	5 SETs (M/s Hitachi make) are already available at site.
44	220kV Bus Bar Protection Panel (Single)-(with Automation)	SET	1	1	0	1 SET (M/s Hitachi make) is already available at site.
45	Line Current Differential Relay	SET	10	10	0	Installation of the line current differential relay is the part of Installation & commissioning of 220KV Line protection panel.
46	Complete Substation automation System for 400kV Main bay as per Technical Specification	EA	2	2	0	2nos. (M/s Hitachi make) are already available at site.
47	Complete Substation automation System for 400kV Tie bay as per Technical Specification	EA	2	1	1	1no. (M/s Hitachi make) is already available at site.
48	Complete Substation automation System for 220kV bay as per Technical Specification	EA	11	11	0	11nos.(M/s Hitachi make) are already available at site.
49	220kV,1600A,0.5mH ,50kA Line Trap	EA	10	10	0	10nos. (M/s Hitachi make) are already available at site.
50	1.1KV GRADE 4CX6 SQMM (PVC) POWER CABLE	KM	6	6	0	2.5KM will be supplied under SS-108 PKG. 3.5KM Will be supplied from Bulk procurement / other regional level procurement.
51	1.1KV GRADE 2CX6 SQMM (PVC) POWER CABLE	KM	3	3	0	3KM Will be supplied from Bulk procurement / other regional level procurement.
52	1.1KV GRADE 3CX2.5 SQMM CONTROL CABLE	KM	17	17	0	17KM will be supplied under SS-108 PKG
53	1.1KV GRADE 5CX2.5 SQMM CONTROL CABLE	KM	31	31	0	24KM will be supplied under SS-108 PKG. 7KM Will be supplied from Bulk procurement / other regional level procurement.
54	1.1KV GRADE 10CX2.5 SQMM CONTROL CABLE	KM	7	7	0	7KM will be supplied under SS-108 PKG
55	1.1KV GRADE 19CX1.5 SQMM CONTROL CABLE	KM	7	7	0	7KM will be supplied under SS-108 PKG
56	1.1KV GRADE 27CX1.5 SQMM CONTROL CABLE	KM	2	2	0	1.65KM will be supplied under SS-108 PKG. 0.35KM Will be supplied from Bulk procurement / other regional level procurement.
57	4PAIR, 0.5SQMM SCREENED CABLE	KM	2	2	0	2KM will be supplied under SS-108 PKG
59	1.1KV GRADE 3.5CX300 SQMM (XLPE) POWER CABLE	KM	1	1	0	0.4KM will be supplied under SS-108 PKG. 0.6KM Will be supplied from Bulk procurement / other regional level procurement.
61	1.1KV GRADE 3.5CX70 SQMM (PVC) POWER CABLE	KM	16	16	0	16KM will be supplied under SS-108 PKG
62	1.1KV GRADE 3.5CX35 SQMM (PVC) POWER CABLE	KM	1	1	0	0.2KM will be supplied under SS-108 PKG. 0.8KM Will be supplied from Bulk procurement / other regional level procurement.
63	1.1KV GRADE 4CX16 SQMM (PVC) POWER CABLE	KM	6	6	0	6KM will be supplied under SS-108 PKG
64	Air conditioning system for Switchyard Panel Room of 9m length	SET	1	0	1	
65	Air conditioning system for Switchyard Panel Room of 6m length	SET	3	3	0	3nos. are already available at site.

66	Fire Detection and Alarm System for Switchyard Panel Room of 6 mlength	SET	3	3	0	3 SETs are already available at site.
67	Fire Detection and Alarm System for Switchyard Panel Room of 9 mlength	SET	1	0	1	
68	HVV spray system, Hydrant system and complete U/G & O/G piping and accessories etc. out side the pump house for 500MVA , 400KV/220/33kV, 3-phase Autotransformer	SET	2	2	0	2 SETs. are already available at site.
69	Supply of 250NB, 5mm thick MS Pipe(AG) for Hydrant system outside the pump house as per standard POWERGRID TS of Fire fighting system	M	300	0	300	
70	Illumination System for switchyard panel room of 9 m length	LS	1	0	1	
71	Illumination System for switchyard panel room of 6 m length	LS	3	3	0	3nos. are already available at site.
72	TYPE L1 STREET LIGHTING POLE OF 6 METER AS PER TECHNICALSPECIFICATION.	EA	35	0	35	
73	LED STREET LIGHT LUMINAIRE TYPE SL-L1 (= 45W)AS PER TECHNICALSPECIFICATION	EA	35	0	35	
74	FIRE WALL MOUNTED LED LUMINARIE TYPE FL-2 (250W)	EA	75	0	75	
75	LIGHTING FIXTURE LED LUMINAIRES TYPE FL2 AS PER TECH. SPECIFICATIONS	EA	75	0	75	
76	LED FLOOD LIGHT LUMINARIESTYPE FL-1 (150W) AS PER TECHNICALSPECIFICATION	EA	75	0	75	
77	Outdoor Power Receptacle for oilfiltration unit (250A)	EA	2	2	0	2nos. are already available at site.
78	63A, 415V : Interlocked switch socket outdoor Receptacle (type RP) as per technical specifications	EA	3	3	0	3nos. are already available at site.
79	Lighting panel SLP for Street Lighting	EA	3	3	0	3nos. are already available at site.
80	Lighting Panel type ACP-3 as per technical specification	EA	4	2	2	2nos. are already available at site.
81	Lighting Panel type ACP-2 as per technical specification	EA	4	2	2	2nos. are already available at site.
82	Standard Pipe Structure for 400kV BPI (excluding wave trap)	EA	18	12	6	12nos. are already available at site.
84	Fabrication, galvanising and supply of Standard Pipe Structure - 400 kV,1-Phase, CT including nuts, bolts, all type of washers, packplates, step bolts and gusset plates excluding foundation bolts	EA	12	9	3	9nos. are already available at site.
85	Fabrication, galvanising and supply of Standard Pipe Structure - 400 kV,3-Phase, ISOLATOR including nuts,bolts, all type of washers, packplates,step bolts and gusset plates excluding foundation bolts	EA	12	8	4	8nos. are already available at site.
86	Fabrication, galvanising and supply of Standard Pipe Structure - 400 kV,1-Phase, SA including nuts, bolts,all type of washers, packplates, stepbolts and gusset plates excluding foundation bolts	EA	6	6	0	6nos. are already available at site.
87	Standard Pipe Structure for 220kV BPI for WT (1- phase)	EA	30	30	0	30nos. are already available at site.
88	Fabrication, galvanising and supply of Standard Pipe Structure - 220kV SA including nuts, bolts, all type of washers, packplates, stepbolts and gusset plates excluding foundation bolts	EA	21	21	0	21nos. are already available at site.
89	Fabrication, galvanising and supply of Standard Pipe Structure - 220kV ISOLATOR including nuts, bolts, all type of washers, packplates,step bolts and gusset plates excluding foundation bolts	EA	37	37	0	37nos. are already available at site.
90	Fabrication, galvanising and supply of Standard Pipe Structure - 220kV CVT including nuts, bolts, all type of washers, packplates, stepbolts and gusset plates excluding foundation bolts	EA	21	21	0	21nos. are already available at site.
91	Fabrication, galvanising and supply of Standard Pipe Structure - 220kV CT including nuts, bolts, all type of washers, packplates, stepbolts and gusset plates excluding foundation bolts	EA	33	33	0	33nos. are already available at site.
92	Standard Pipe Structure for 220kV BPI (excluding wave trap)	EA	63	57	6	57nos. are already available at site.

93	Fabrication, galvanising and supply of Std Pipe Structure - 220 kV highBPI including nuts, bolts, all type of washers, packplates, step bolts and gusset plates excluding foundation bolts	EA	27	27	0	27nos. are already available at site.
94	Erection hardware for 400kV Jackbus (quad bersimis)	EA	2	0	2	
95	Fabrication, galvanising and supply of Lattice Structures (MS Steel), to be designed during detailed engineering, for towers, beams and equipment support structure including pack plates / packwashers and gusset plates excluding fasteners and foundation bolts	MT	247	90	157	90 MT is available at site
96	Fabrication, galvanising and supply of fasteners (nuts, bolts and washers) including step bolts for lattice and pipe structures to be designed during detailed engineering	MT	24	9	15	9 MT is available at site
97	Fabrication, galvanising and supply of foundation bolts including nuts, checknut and washers for lattice and pipe structures to be designed during detailed engineering	MT	19	4	15	4 MT is available at site
98	Fabrication, galvanising and supply of Lattice Structures (HT Steel), to be designed during detailed engineering, for towers, beams and equipment support structure including pack plates / packwashers and gusset plates excluding fasteners and foundation bolts	MT	130	38	92	38 MT is available at site
99	Foundation Bolts of 28mm Size	Nos	156	Remaining quantity for equipment foundations is available at site	156	