

Materials List for Std Design 220 kV CC

Issue		Prepared By / Date	Checked By
1	Draft issue - Long lead time items only	S Kinghan & A Upadhyaya / 07/11/2023	A Baird / 07/11/2023

Notes:
1) Secondary items, primary manufacturer details and sections that have no components to be completed as part of the standard detailed design development.
2) Additional columns for secondary to be added when panel allocations are known.

Additional columns for secondary to be added when panel allocations are known.																					Ordering columns hidden >>		
Item No.	Description	Comment	Supply To	Manufacturer / type / ordering details	Manufacturers drawing number	TP Stock Code	125 V Battery System	220kV Switchyard General	220kV Switchyard Bay A#	220kV Switchyard Bay B#	220kV Switchyard Bay C#	220kV Switchyard Bay D#	220kV Switchyard Bay E#	220kV Switchyard Bay F#	220kV Switchyard Bus 1	220kV Switchyard Bus 2	33 kV Switchyard Bay A##	33kV Switchyard Bay B##	Secondary (Note 2)	Contingency	Total	Unit	
A Primary Plant																							
1	Supply Transformer 220/33 kV 150-200MVA YNd3, w 220 kV and 33 kV SAs	T1, T2	Elec Contractor		TBC					1				1							2	ea	
2	DCB, 220 kV, excl. e/sw (3-phase unit)	DCB A#2, B#2, E#2, F#2	Elec Contractor		TBC				1	1			1	1							4	ea	
3	DCB, 220 kV, incl. e/sw	DCB C#8, D#8	Elec Contractor		TBC						1	1									2	ea	
4	DCB, 33 kV, excl. e/sw (3-phase unit)	DCB A##2, B##2	Elec Contractor		TBC												1	1			2	ea	
5	CT, 220 kV, 5 core (1-phase units)	CT A#2, B#2, E#2, F#2, C#8	Elec Contractor		TBC				3	3	3		3	3							15	ea	
6	CT, 33 kV, 5 core (1-phase units)	A##2, B##2	Elec Contractor		TBC												3	3			6	ea	
7	CVT, 220 kV (1-phase units)	CVT A#2, E#2, C#7, D#7	Elec Contractor		TBC				3		3	3	3								12	ea	
8	SA, 220 kV (1-phase units)	SA A#2, E#2	Elec Contractor		TBC				3				3								6	ea	
9	ES, 220 kV (3-phase unit), excl. Insulators, refer item E1	ES A#9, B#9, C#0, D#0, E#9, F#9	Elec Contractor		TBC				1	1	1	1	1	1							6	ea	
10	ES, 33 kV (3-phase unit), excl. Insulators, refer item E3	ES A##9A, A##9B, B##9A, B##9B	Elec Contractor		TBC												2	2			4	ea	
11	ET, 33/0.415 kV, ZNyn11	ET1, 2 (also used as LS)	Elec Contractor		TBC												1	1			2	ea	
12	33 kV NER	NER1, 2	Elec Contractor		TBC												1	1			2	ea	
13	NCT - LV	NCT1B, 2B	Elec Contractor		TBC												1	1			2	ea	
14	NCT - HV	NCT1B, 2B	Elec Contractor		TBC					1				1							2	ea	
15	VT, 33 kV (1-phase units)	A##2, B##2	Elec Contractor		TBC												3	3			6	ea	
16	Oil Plate Separator		Elec Contractor		TBC			1													1	ea	
B Conductor & Bus Bar																							
C Support stands for primary plant																							
1	CT, 220 kV stand	For item A5	Elec Contractor		TBC				3	3	3		3	3							15	ea	
2	CT, 33 kV stand	For item A6	Elec Contractor		TBC												3	3			6	ea	
3	CVT, 220 kV stand	For item A7	Elec Contractor		TBC				3		3	3	3								12	ea	
4	SA, 220 kV stand	For item A8	Elec Contractor		TBC				3				3								6	ea	
5	ES, 220 kV stand	For item A9	Elec Contractor		TBC				1	1	1	1	1	1							6	ea	
6	ES, 33 kV stand	For item A10	Elec Contractor		TBC												2	2			4	ea	
7	VT, 33 kV stand	For item A15	Elec Contractor		TBC												3	3			6	ea	
8	Conductor Support Post, 3P1C, 220 kV stand		Elec Contractor		TBC				1	1	1		1	1							5	ea	
9	Bus Support Post, 3P2C, 220 kV stand	For HVUBS	Elec Contractor		TBC										2	2					4	ea	
10	Custom Steel Pole Gantry 220kV		Elec Contractor	Includes all fasteners to assembly structure, lightning rods and lighting supports	TBC				1				1								2	ea	
D Power cables & Terminations																							
E Switchyard Hardware - Insulators, clamps, adaptor plates, conductor termination fittings/assemblies																							
1	Insulator 220 kV Post, Normal Strength Porcelain, NGK	For ES, CSP, BSP, Gantry	Elec Contractor		H10-2	S011360T-B-F			9	6	3	3	9	6	6	6					48	ea	
2	Insulator 220 kV, HVUBS	For HVUBS	Elec Contractor												6	6					12	ea	
3	Insulator 66 kV Post, Normal Strength Porcelain, NGK	For ES	Elec Contractor														6	6			12	ea	
F Secondary Plant																							
G Relays																							
H Miscellaneous & Cabinets																							
I SMS / LAN																							
1	SMS SG4260 Gateway		Loop	Digital Sub version															2		2	ea	
J Revenue metering																							
K Transpower Communications																							
1	TransGo Node Cabling			Lead-in Fibre Cabling															2		2	ea	
1	TransGo Node Build and Dispatch			Profile A SDH node															2		2	ea	
L Control Building																							
M Batteries																							
1	125 V, 300 Ah Battery String, DC1		Elec Contractor	EXIDE Absolyte 50-G13		S402036	1														1	ea	
1	125 V, 300 Ah Battery String, DC2		Elec Contractor	ENERSYS Supersafe 12TM-300		S402006	1														1	ea	
N Misc																							