

Materials List for Std Design 220 kV Customer Connection Breaker and a Half

Issue	Prepared By / Date	Checked By
1	Draft issue - Long lead time items only	K Martin / 18/02/2026
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- 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.

Item No.	Description	Comment	Supply To	Manufacturer / type / ordering details	Manufacturers drawing number	TP Stock Code	125 V Battery System	220 kV Switchyard General	220 kV Switchyard Bay A#	220 kV Switchyard Bay B#	220 kV Switchyard Bay C#	220 kV Switchyard Bay D#	220 kV Switchyard Bay E#	220 kV Switchyard Bay F#	220 kV Switchyard Bay G#	220 kV Switchyard Bay H#	220 kV Switchyard Bay J#	220 kV Switchyard Bay K#	220 kV Switchyard Bus 1	220 kV Switchyard Bus 2	33 kV Switchyard Bay G##	33kV Switchyard Bay K##	Secondary (Note 2)	Ordering columns hidden >>				
																								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																				2	ea		
2	DCB, 220 kV, excl. e/sw (3-phase unit)	A#2, C#2, D#2, F#2, G#2, H#8, J#8, K#2	Elec Contractor		TBC				1		1	1			1	1	1	1								8	ea	
3	CB, 220 kV, (3-phase unit)	B#2, E#2	Elec Contractor		TBC					1																2	ea	
4	DCB, 33 kV, excl. e/sw (3-phase unit)	G##2, K##2	Elec Contractor		TBC																	1	1			2	ea	
5	CT, 220 kV, 5 core (1-phase units)	A#2, B#2, C#2, D#2, E#2, F#2, G#2, H#8, K#2	Elec Contractor		TBC				3	3	3	3	3	3	3	3											27	ea
6	CT, 33 kV, 5 core (1-phase units)	G##2, K##2	Elec Contractor		TBC																			3	3		6	ea
7	CVT, 220 kV (1-phase units)	A#2, C#2, D#2, F#2, H#7, J#7	Elec Contractor		TBC				3		3	3		3			3										18	ea
8	DS+ES, 220 kV	B#3, B#5, E#3, E#5,	Elec Contractor		TBC					2																	4	ea
9	ES+DS+ES, 220 kV	A#3, C#3, D#3, F#3,	Elec Contractor		TBC				1		1	1			1												4	ea
10	ES, 220 kV (3-phase unit), excl. Insulators, refer item E1	G#9, H#0, H#80, J#0, J#80, K#9	Elec Contractor		TBC										1		2	2	1								6	ea
11	ES, 33 kV (3-phase unit), excl. Insulators, refer item E3	G##9A, G##9B, K##9A, K##9B	Elec Contractor		TBC																	2	2				4	ea
12	SA, 220 kV (1-phase units)	A#2, C#2, D#2, F#2	Elec Contractor		TBC				3		3	3															12	ea
13	NER LV	NER1B, NER2B	Elec Contractor		TBC																						2	ea
14	NER HV	NER1A, NER2A	Elec Contractor		TBC																	1	1				2	ea
15	NCT - LV	NCT1B, NCT2B	Elec Contractor		TBC																						2	ea
16	NCT - HV	NCT1A, NCT2A	Elec Contractor		TBC																						2	ea
17	VT, 33 kV (1-phase units)	G##2, K##2	Elec Contractor		TBC																						6	ea
18	Oil Plate Separator	To be confirmed as required with confirmed oil containment design approach	Elec Contractor		TBC																						0	ea
B Conductor & Bus Bar																												
C Support stands for primary plant																												
1	CT, 220 kV stand (10)	For item A5	Elec Contractor		TBC				3	3	3	3	3	3	3	3											27	ea
2	CT, 33 kV stand (10)	For item A6	Elec Contractor		TBC																						6	ea
3	CVT, 220 kV stand (10)	For item A7	Elec Contractor		TBC				3		3	3				3	3										18	ea
4	SA, 220 kV stand (10)	For item A12	Elec Contractor		TBC				3		3	3															12	ea
5	ES, 220 kV stand	For item A10	Elec Contractor		TBC																						6	ea
6	ES, 33 kV stand	For item A11	Elec Contractor		TBC											1	2	2	1								4	ea
7	VT, 33 kV stand	For item A17	Elec Contractor		TBC																						6	ea
8	CS, 33 kV stand		Elec Contractor		TBC																						4	ea
9	Conductor Support Post, 3P1C, 220 kV stand		Elec Contractor		TBC				1		1	1			1	1	1	1	1								8	ea
10	Bus Support Post, 3P2C, 220 kV stand	For HVUBS	Elec Contractor		TBC																						16	ea
11	Custom Steel Pole Gantry 220kV		Elec Contractor		TBC				1	1	1	1	1	1	1					8	8						6	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	DS	Elec Contractor		H10-2	S011360T-B-F			6	12	6	6	12	6													48	ea
2	Insulator 220 kV Post, Normal Strength Porcelain, NGK	ES	Elec Contractor												3	6	6	3									18	ea
3	Insulator 220 kV Post, Normal Strength Porcelain, NGK	CSP	Elec Contractor						3		3	3			3	3	3	3									24	ea
4	Insulator 220 kV Post, Normal Strength Porcelain, NGK	BSP	Elec Contractor																	24	24						48	ea
5	Insulator 220 kV Post, Normal Strength Porcelain, NGK	Gantry	Elec Contractor						3	3	3	3	3	3													18	ea
6	Insulator 220 kV, HVUBS, Composite	For HVUBS	Elec Contractor																	9	9						18	ea
7	Insulator 66 kV Post, Normal Strength Porcelain, NGK	For 33 kV ES & CS	Elec Contractor						3		3	3															20	ea
F Secondary Plant																												
G Relays																												
H Miscellaneous & Cabinets																												
I SMS / LAN																												
1	SMS SC4260 Gateway		Loop	Digital Sub version																							2	ea
J Revenue metering																												
K Transpower Communications																												
1	TransGo Node Cabling			Lead-in Fibre Cabling																							2	ea
2	TransGo Node Build and Dispatch			Profile A SDH node																							2	ea
L Control Building																												
M Batteries																												
1	125 V, 400 Ah Battery String, DC1		Elec Contractor		EXIDE ABSOLYTE 90G11		S402038	1																			1	ea
2	125 V, 400 Ah Battery String, DC2		Elec Contractor		ENERSYS Supersafe TM400		S402008	1																			1	ea
N Misc																												