



DRAWING INDICATIVE FOR BIDDING PURPOSE ONLY

NOTE:

- (1) The final Nomenclature will be provided later by KETRACO
- (2) 79 auto reclosing relay needs to be able to control 2 circuit breaker, if not then 2 relays will be required one for each breaker

VOLTAGE TRANSFORMER DETAILS					
DESIGNATION	WINDING	RATIO	CLASS	BURDEN (VA)	
CVT-21,23 (PROTECTION)	WINDING -1	$220kV/\sqrt{3} : 0.11kV/\sqrt{3}$	3P(1.0)		100VA
	WINDING -2	$220kV/\sqrt{3} : 0.11kV/\sqrt{3}$	3P		
CVT-24,25 (METERING)	WINDING -1	$220kV/\sqrt{3} : 0.11kV/\sqrt{3}$	0.2		100VA
	WINDING -2	$220kV/\sqrt{3} : 0.11kV/\sqrt{3}$	0.2		
CVT-BB1,BB2 (PROTECTION)	WINDING -1	$220kV/\sqrt{3} : 0.11kV/\sqrt{3}$	3P(1.0)		100VA
	WINDING -2	$220kV/\sqrt{3} : 0.11kV/\sqrt{3}$	3P		
CVT-12,22 (PROTECTION)	WINDING -1	$220kV/\sqrt{3} : 0.11kV/\sqrt{3}$	3P		100VA
	WINDING -2	$220kV/\sqrt{3} : 0.11kV/\sqrt{3}$	3P		

	Motorised Disconnect Switch/Earth Switch
	Motorised Disconnect Switch
	Circuit Breaker Spring Charger Operated Mechanizm
	3Ph, Two Winding Capacitive Voltage Transformer
	1Ph, Two Winding Capacitive Voltage Transformer
	Voltage Transformer
	Current Transformer
	Surge Arrester with Discharge Counter

CURRENT TRANSFORMER DETAILS					
DESIGNATION	CORE	RATIO	CLASS	BURDEN (VA)	REMARKS
T27	CORE-1	2000-1000/A	0.2s	30VA	METERING
	CORE-2	2000-1000/A	0.2s	30VA	METERING

DESIGNATION	CORE	RATIO	CLASS	BURDEN (VA)	REMARKS
T11, T14	CORE-1	<u>2000-1000/A</u>	5P20	30VA	PROTECTION
T21, T24	CORE-2	<u>2000-1000/A</u>	5P20	30VA	PROTECTION
T12, T13	CORE-3	<u>2000-1000/A</u>	0.2s	30VA	CONTROL
T23, T22	CORE-4	<u>2000-1000/A</u>	5P20	30VA	PROTECTION
	CORE-5	<u>2000-1000/A</u>	5P20	30VA	PROTECTION

DESIGNATION	CORE	RATIO	CLASS	BURDEN (VA)	REMARKS
T16	CORE-1	<u>2000</u> -1000/A	5P20	30VA	PROTECTION
T26	CORE-2	<u>2000</u> -1000/A	5P20	30VA	PROTECTION
	CORE-3	<u>2000</u> -1000/A	5P20	30VA	PROTECTION

DESIGNATION	CORE	RATIO	CLASS
NEUTRAL HVCT	CORE-1	<u>2000-1000/A</u>	5P20
	CORE-2	<u>2000-1000/A</u>	5P20
NEUTRAL LV CT	CORE-1	<u>2000-1000/A</u>	5P10
	CORE-2	2000-1000/A	5P10

NO	Panel Name	Device Ref	Protection Function
D02+W	220kV Diameter 2 control Panel	BCU	25
D02+R1	220kV Mariakani Line 1 Protection Panel	21(Main 1) 79	21, 50/51, 50N/51N, 67/67N, 27/59, 50BF,50STB,SOTF 79, 25
D02+R2	220kV Mariakani Line 1 Protection Panel 2	87L21(Main 2) 87T 87T, 87N, 24, 49, 50G/51G HV/REF LV/REF	87L, 21, 50/51, 50N/51N, 67/67N, 27/59, 50BF,50STB,SOTF 87T, 87N, 24, 49, 50G/51G REF (HV Neutral) REF (LV Neutral)
D02+R3	220kV Transformer 2 Protection Panel 1	87HVC 50BF/50ST HV/SBEF LV/SBEF	87HVC, 50/51, 50N/51N, 67/67N, 27/59, 50BF,50STB 50BF/50ST SBEF (HV Neutral) SBEF (LV Neutral)
D02+R4	220kV Transformer 2 Protection Panel 2	50/51HV 50BF/50ST	50/51, 50N/51N, 67/67N 50BF/50ST
D02+R5	220kV Mariakani Line 2 Protection Panel 1	21(Main 1) 79	21, 50/51, 50N/51N, 67/67N, 27/59, 50BF,50STB,SOTF 79, 25
D02+R6	220kV Mariakani Line 2 Protection Panel 2	87L21(Main 2)	87L, 21, 50/51, 50N/51N, 67/67N, 27/59, 50BF,50STB,SOTF
D00+RBB1	220kV Busbar 1 Protection Panel	87B	87B, 50BF, 50ST
		87B	87B, 50BF, 50ST
		87B	87B, 50BF, 50ST
D00+RBB2	220kV Busbar 2 Protection Panel	87B	87B, 50BF, 50ST