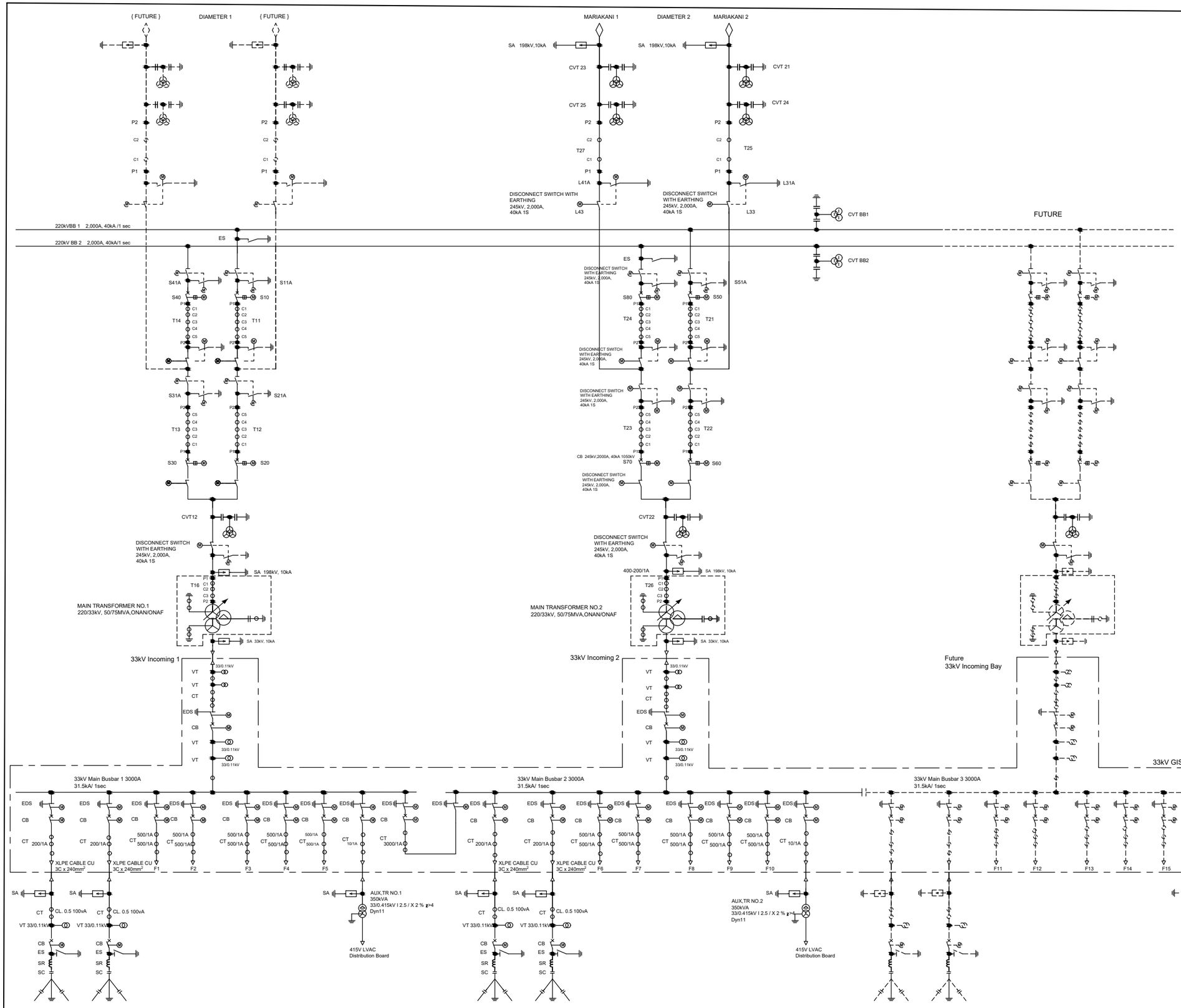

NOTE: The final Nomenclature will be provided later by KETRACO

SYMBOL	DESCRIPTION
	Motorized disconnect Switch/Earth Switch
	Motorized Disconnect Switch
	Circuit Breaker 220kV, 2000A, 40KA(1sec). Spring Changed Operation Mechanism
	3Ph, TWO WINDING, CAPACITIVE VOLTAGE TRANSFORMER
	1Ph, TWO WINDING, CAPACITIVE VOLTAGE TRANSFORMER
	3Ph, VOLTAGE TRANSFORMER
P2 P1	CURRENT TRANSFORMER
	REACTOR
	CAPACITOR
	SURGE ARRESTER WITH DISCHARGE COUNTER

Current Transformer Details

T27, T25

Core	Ratio	Class	Burden (VA)	Remarks
Core-1	2000-1000/1A	0.2s	30	Metering
Core-2	2000-1000/1A	0.2s	30	Metering

T11,T14,T21,T24

Core	Ratio	Class	Burden (VA)	Remarks
Core-1	2000-1000/1A	5P20	30	Busbar Protection Main-1
Core-2	2000-1000/1A	5P20	30	Busbar Protection Main-2
Core-3	2000-1000/1A	0.2s	30	Metering
Core-4	2000-1000/1A	5P20	30	Line Protection Main-1
Core-5	2000-1000/1A	5P20	30	Line Protection Main-2

T12,T13,T23,T22

Core	Ratio	Class	Burden (VA)	Remarks
Core-1	2000-1000/1A	5P20	30	Trf Protection Main-1
Core-2	2000-1000/1A	5P20	30	Trf Protection Main-2
Core-3	2000-1000/1A	0.2s	30	Metering
Core-4	2000-1000/1A	5P20	30	Line Protection Main-1
Core-5	2000-1000/1A	5P20	30	Line Protection Main-2

T16,T26

Core	Ratio	Class	Burden (VA)	Remarks
Core-1	2000-1000/1A	5P20	30	Trf Protection Main-1
Core-2	2000-1000/1A	5P20	30	Trf Protection Main-2
Core-3	2000-1000/1A	5P20	30	Trf Protection Main-2

Voltage Transformer Details

	Winding	Ratio	Class	Burden (VA)
CVT-21,23 (Protection)	Winding-1	220kV / $\sqrt{3}$kV:0.11/$\sqrt{3}$kV	3P (1.0)	100
	Winding-2	220kV / $\sqrt{3}$kV:0.11/$\sqrt{3}$kV	3P	
CVT-24,25 (Metering)	Winding-1	220kV / $\sqrt{3}$kV:0.11/$\sqrt{3}$kV	0.2	100
	Winding-2	220kV / $\sqrt{3}$kV:0.11/$\sqrt{3}$kV	0.2	
CVT-BB1,BB2 (Protection)	Winding-1	220kV / $\sqrt{3}$kV:0.11/$\sqrt{3}$kV	3P (1.0)	100
	Winding-2	220kV / $\sqrt{3}$kV:0.11/$\sqrt{3}$kV	3P	
CVT-12,22 (Protection)	Winding-1	220kV / $\sqrt{3}$kV:0.11/$\sqrt{3}$kV	3P	100
	Winding-2	220kV / $\sqrt{3}$kV:0.11/$\sqrt{3}$kV	3P	

DRAWING INDICATIVE FOR BIDDING PURPOSE ONLY

KETRACO

KENYA ELECTRICITY TRANSMISSION COMPANY LIMITED (KETRACO) REPUBLIC OF KENYA

JOINT VENTURE OF NIPPON KOEI.,LTD NEW JEC INC

MOMBASA SPECIAL ECONOMIC ZONE DEVELOPMENT PROJECT
ELECTRICITY SUB-PROJECT

SEZ Substation-Single Line Diagram
Electrical

FEBRUARY 2024 MSEZ-2022-SS/E-002