

NEW AUGMENTATION SCOPE OF WORK

EXISTING SYSTEM

FUTURE SCOPE

THIS IS A INDICATIVE SLD.
DETAILED BAY SEQUENCING AND
ARRANGEMENT SHALL BE DONE
DURING DETAILED ENGINEERING
BY THE CONTRACTOR.

EXISTING KALLAM PS EQUIPMENT DETAILS

BILL OF QUANTITY OF 400KV EQUIPMENTS (TABLE-1)

SL. NO.	SYMBOL	DESCRIPTION
1A		400KV, 400A, 63KA for 3 SEC. CIRCUIT BREAKER WITH SUPPORT STRUCTURE, SFG, 3P, WITH CLOSING RESISTOR, WITHOUT CONTROL SWITCHING DEVICE
1B		400KV, 400A, 63KA for 3 SEC. CIRCUIT BREAKER WITH SUPPORT STRUCTURE, SFG, 3P, WITHOUT CLOSING RESISTOR, WITH CONTROL SWITCHING DEVICE
1C		400KV, 400A, 63KA FOR 3 SEC. CIRCUIT BREAKER WITH SUPPORT STRUCTURE, SFG, 3P, WITHOUT CLOSING RESISTOR, WITHOUT CONTROL SWITCHING DEVICE
2A		400KV/150KA/63KA 1 SEC. INDIVIDUAL POLE OPERATED DOUBLE BREAK TYPE ISOLATOR WITH ONE EARTH SWITCH
2C		400KV/150KA/63KA 1 SEC. INDIVIDUAL POLE OPERATED DOUBLE BREAK TYPE ISOLATOR WITH TWO EARTH SWITCH
3A		400KV, 600A, 300KA (1-#) 63KA FOR 1SEC WITH 120% EXTENDED CURRENT RATING CURRENT TRANSFORMER
4A		400KV, 4400Pf, 1-PH 3CORE LINE CVT
4B		400KV, 4400Pf, 1-PH 3CORE BUS CVT
5		336KV, (1-#) 25KA, HIGH DUTY LIGHTNING ARRESTER
6		400KV/0.5mh, 3150A, 63KA FOR 1SEC LINE TRAP (PEDESTAL MOUNTED)
7		420KV, 125MVAR (THREE PHASE) BUS REACTOR
8		420KV, 50MVAR (THREE PHASE) LINE REACTOR
9		AUTO TRANSFORMER, 500MVA (THREE PHASE), 400/220/33KV, YNd011, 0.9AN/DNAF/0FAF, 300/400/500MVA

480KV, 4400PF CAPACITIVE VOLTAGE TRANSFORMER (3 CORE 1-PH) (TABLE-6)

CORE NO.	PRIMARY VOLTAGE (KV)	SECONDARY VOLTAGE (KV)	ACCURACY CLASS	OUTPUT BURDEN (VA)	RATED VOLTAGE FACTORS	PURPOSE
CORE-1	400/√3	110/√3	0.5&3P	50	1.5FOR 30 SECS. 1.2FOR CONTINUOUS	PROTECTION
CORE-2	400/√3	110/√3	0.5&3P	50	1.5FOR 30 SECS. 1.2FOR CONTINUOUS	PROTECTION
CORE-3	400/√3	110/√3	0.2	50	1.5FOR 30 SECS. 1.2FOR CONTINUOUS	METERING

245KV, 4400PF CAPACITIVE VOLTAGE TRANSFORMER (3 CORE 1-PH) (TABLE-7)

CORE NO.	PRIMARY VOLTAGE (KV)	SECONDARY VOLTAGE (KV)	ACCURACY CLASS	OUTPUT BURDEN (VA)	RATED VOLTAGE FACTORS	PURPOSE
CORE-1	220/√3	110/√3	3P	50	1.5FOR 30 SECS. 1.2FOR CONTINUOUS	PROTECTION
CORE-2	220/√3	110/√3	3P	50	1.5FOR 30 SECS. 1.2FOR CONTINUOUS	PROTECTION
CORE-3	220/√3	110/√3	0.2	50	1.5FOR 30 SECS. 1.2FOR CONTINUOUS	METERING

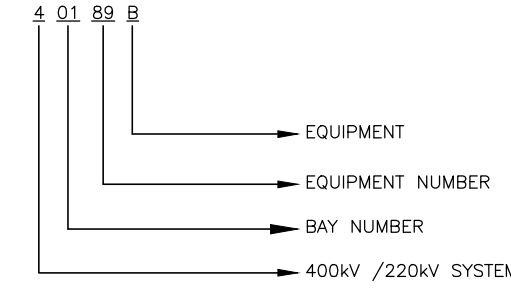
220 KV 6 CORE CURRENT TRANSFORMER DETAILS (TABLE-11)

SL. NO.	CORE NO.	APPLICATION	CURRENT RATIO	OUTPUT BURDEN (VA)	ACCURACY CLASS	PRIMARY RATED VOLTAGE (KV)	SECONDARY RATED VOLTAGE (KV)	MAX. EXPOSURE (HRS)	MAX. EXPOSURE (HRS)
1	1	BUS DPT. CHG	1000/00/1A	-	PX	1000/00/1A	10/0/2.5	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%
2	2	BUS DPT. CHG	1000/00/1A	-	PX	1000/00/1A	10/0/2.5	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%
3	3	METERING	1000/00/1A	20	0.25	-	-	-	-
4	4	TRANS. BACK UP LINE PROTECTION	1000/00/1A	-	PX	1000/00/1A	10/0/2.5	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%
5	5	TRANS. DPT. / LINE PROTECTION	1000/00/1A	-	PX	1000/00/1A	10/0/2.5	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%


400 KV 6 CORE CURRENT TRANSFORMER DETAILS (TABLE-1)

SL. NO.	CORE NO.	APPLICATION	CURRENT RATIO	OUTPUT BURDEN (VA)	ACCURACY CLASS	PRIMARY RATED VOLTAGE (KV)	SECONDARY RATED VOLTAGE (KV)	MAX. EXPOSURE (HRS)	MAX. EXPOSURE (HRS)
1	1	BUS DPT. CHG	1000/00/1A	-	PX	1000/00/1A	10/0/2.5	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%
2	2	BUS DPT. CHG	1000/00/1A	-	PX	1000/00/1A	10/0/2.5	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%
3	3	METERING	1000/00/1A	20	0.25	-	-	-	-
4B	4B	TRANS. BACK UP LINE PROTECTION	1000/00/1A	-	PX	1000/00/1A	10/0/2.5	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%
5A	5A	TRANS. DPT. / LINE PROTECTION	1000/00/1A	-	PX	1000/00/1A	10/0/2.5	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%	30 ON 100%/100% 30 ON 100%/100% 30 ON 100%/100%
6	6	220KV, LINE TRAP, 0.5mh, 1600A, 50KA 1SEC (PEDESTAL MOUNTED)	-	-	-	-	-	-	-

EQUIPMENT IDENTIFICATION SYSTEM:-



FOR TENDER PURPOSE ONLY

OWNER	 KALLAM TRANSMISSION LIMITED Regd. Office: A-52/B, G/F, Al Esth, Badapur, New Delhi -110044, India.		
PROJECT:	Design, Engineering, Procurement, Construction, Testing and Commissioning of 2X 500 MVA 400/220kV AIS Substation at Kallam and 400kV Multi circuit & 400kV Double Circuit Transmission Lines associated with Kallam Transmission Ltd.		
TRANSMISSION SCHEME	Transmission System for Evacuation of Power from RE Project in Osmanabad Area (1GW) in Maharashtra.		
DRG. TITLE	KEY SINGLE LINE DIAGRAM		
SCALE: NTS	JOB NO:		SHEET: 1 OF

KALLAM AUGMENTATION SLD

LINE-7 JSW NEO ENERGY LTD. LINE-6 SERENTICA RENEWABLES INDIA 4 PVT. LTD. LINE-5 VEH AARUSH RENEWABLES

LINE-4 LINE-3 LINE-2 LINE-1