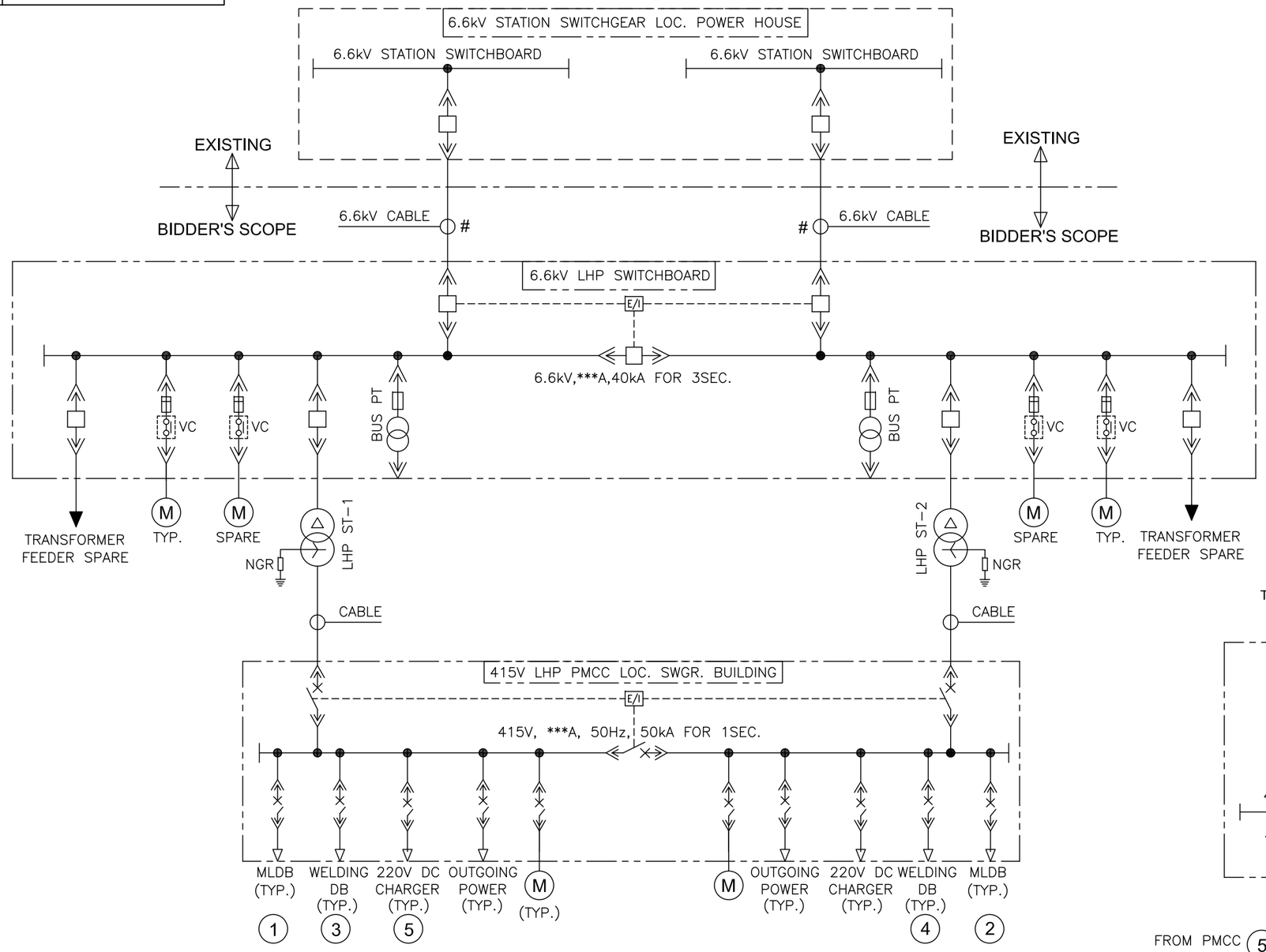
REV 0 | DRG. NO. : ETG099-SESI-EE-LHP-SLD-001

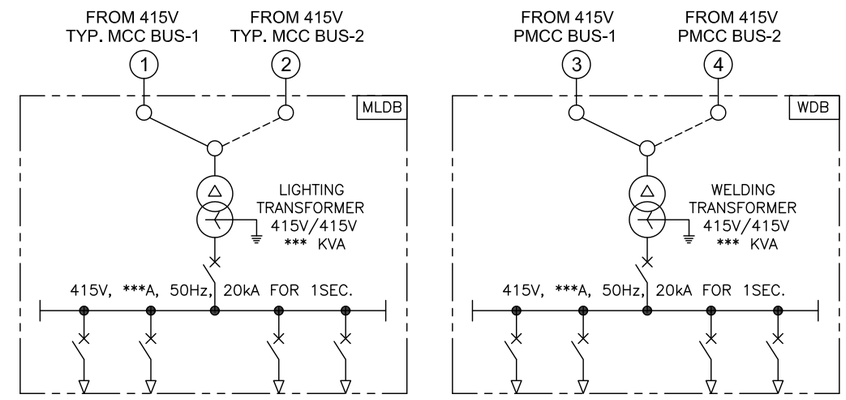


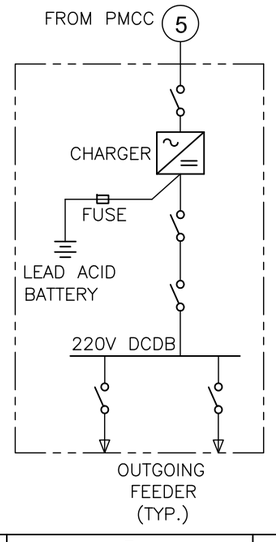
TRANSFORMERS DETAILS

SL. NO.	DESCRIPTION	DESIGNATION	RATING & VOLTAGE(kV)	NOS. OF TRANS–FORMERS
01.	LHP SERVICE TRANSFORMER	LHP ST–1 LHP ST–2	1250 kVA (MIN.) 6.6/0.433kV, ONAN, 3PH, Dyn11, OCTC WITH TAP RANGE OF ±5% IN STEPS OF 2.5% ON HV SIDE	2x100%

LEGEND

	TWO WINDING TRANSFORMER	M	MOTOR
	LV (415V) CIRCUIT BREAKER	NGR	NEUTRAL GROUNDING RESISTOR
TYP.	TYPICAL		VACUUM CIRCUIT BEARKER
	ISOLATOR		
E/I	ELECTRICAL INTERLOCK BETWEEN INCOMERS AND BUS COUPLER		
	MANUAL CHANGE OVER SWITCH		VACUUM CONTACTOR





NOTES:–

1. ALL BREAKER RATINGS WILL BE CONTINOUS RATING AT 50°C AMBIENT.
2. UNLESS OTHERWISE STATED THE TOLERANCE ON PARAMETERS SHALL BE AS PER SPECIFICATION/ BIS / INTERNATIONAL STANDARDS.
3. MINIMUM FAULT LEVEL WITHSTAND :–
   6.6KV ..... 40KA FOR 3 SEC.
   415V ..... 50KA FOR 1 SEC.
   220V DC ... 25KA FOR 1 SEC.
4. 415V SYSTEM WILL BE 3 PHASE, 3 WIRE WITH NEUTRAL SOLIDLY EARTHED.
5. 220V DC LEAD ACID BATTERIES WILL BE RATED TO CATER THE DC LOADS
6. BATTERIES WILL BE UNGROUNDED HAVING FLOATING NEUTRAL.
7. 415V LT BUS DUCTS WILL BE NON SEGREGATED PHASE TYPE. (IF APPLICABLE)
8. UNDER NORMAL OPERATION OF 6.6kV / 415V PMCC HAVING TWO INCOMING BREAKERS AND ONE BUS SECTION BREAKER, THE INCOMING BREAKERS WILL BE NORMALLY CLOSED AND BUS SECTION BREAKER WILL BF NORMALLY OPFN
9. 6.6kV/415V SYSTEM BUSES ARE PROVIDED WITH MANUAL LIVE CHANGEOVER WITH CHECK SYNCHRONISATION AS WELL AS AUTOMATIC SLOW CHANGEOVER.
10. KVA RATING OF THE TRANSFORMER, AS INDICATED ABOVE, SHALL BE AS PER SIZING CALCULATION.
11. *** RATING SHALL BE DECIDED DURING DETAILED ENGINEERING.
12. MLDB WITH LIGHTING TRANSFORMER (1X100%) AND WDB WITH WELDING TRANSFOMER (1X100%)
13. SPARE FEEDER SHALL BE AS PER CONTRACT.
14. # 6.6kV HT INCOMER – 1 & 2 CABLES SHALL BE DIVERTED FROM EXISTING ROUTE (LHS HT SWGR TO LMS) i.e. FROM JNT–13, CABLES SHALL BE CUT & DIVERTED TO NEW FEEDING SYSTEM HT BOARD (IN BIDDER'S SCOPE)

FOR TENDER PURPOSE ONLY

DATE	REV	DRN	CHKD	APPD	REMARKS

GUJARAT INDUSTRIES POWER CO. LTD.

PROJECT: SURAT LIGNITE POWER PROJECT
2 X 125 MW UNITS NO. 1 & 2

OWNER'S ENGINEER: STEAG ENERGY SERVICES (INDIA) PVT. LTD.

TITLE: KEY SINGLE LINE DIAGRAM - LHP

DRAWING No. ETG099-SESI-EE-LHP-SLD-001 | SHEET 1 OF 1 | SIZE A3

DATE:	SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	REV.
07.07.2026	NTS	KMA	SJS/JJ	KEA	0