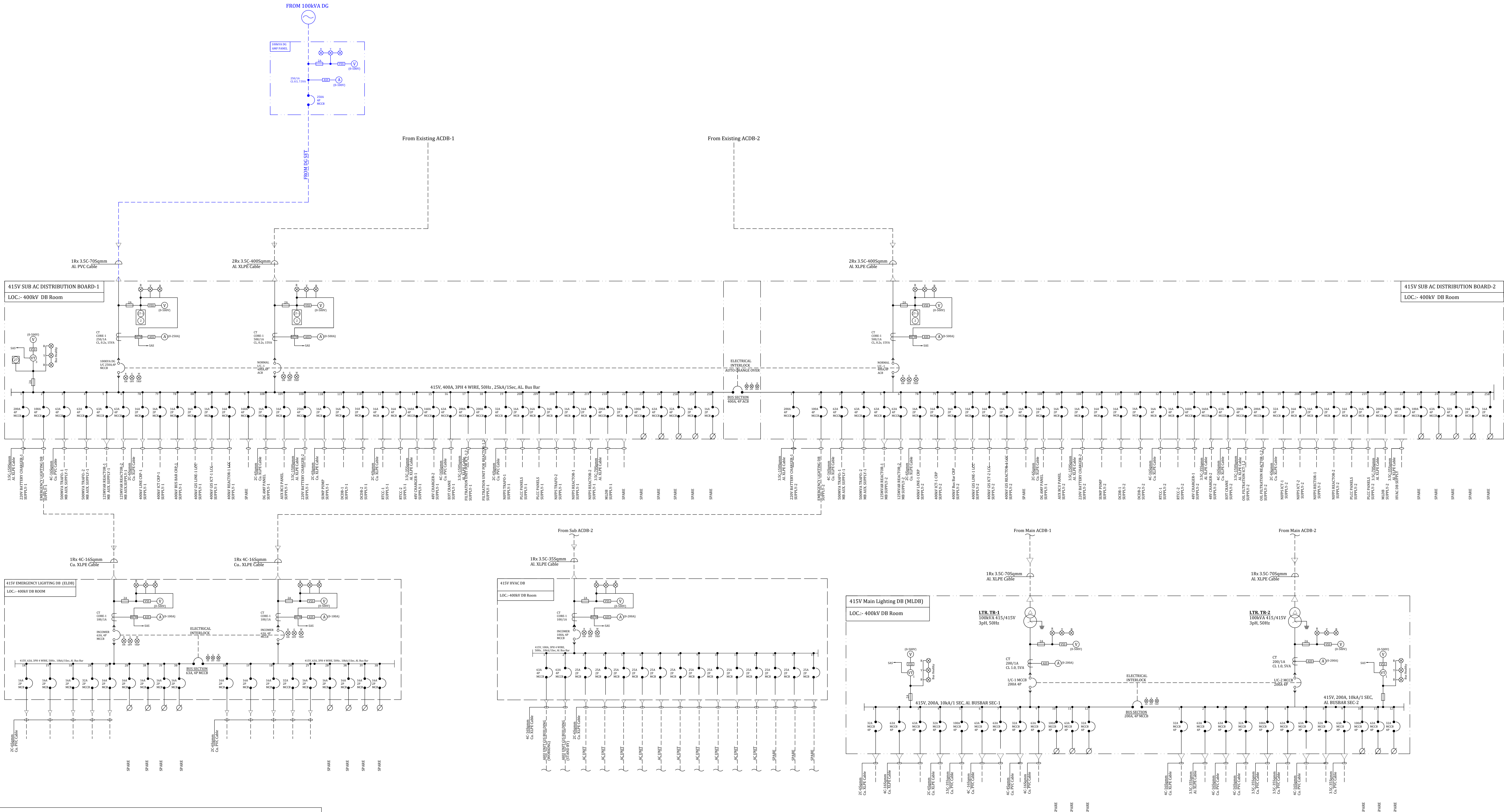




INTERLOCK LOGIC FOR MAIN ADCB, MLDB,MCB DB HAVING 2 INCOMER & 1 BUS COUPLER.			
CONDITION	I/C-1	IC-2	B/C
CASE-1	ON	ON	OFF
CASE-2	ON	OFF	ON
CASE-3	OFF	ON	ON

INTERLOCK LOGIC FOR SUB-1 ACDB-1 HAVING 2 INCOMER, DG INCOMER, & 1 BUS COUPLER.				
CONDITION	I/C-1	IC-2	DG I/C	B/C
CASE-1	ON	ON	OFF	OFF
CASE-2	ON	OFF	OFF	ON
CASE-3	OFF	ON	OFF	ON
CASE-4	OFF	OFF	ON	ON

415V MAIN ACDB 1&2	
INCOMER FEEDERS (1&2 FROM STN. TRAFQ)	
ACB 600 A, 4P	2 Nos
BUS COUPLER	
ACB 600A, 4P	1 Nos
OUTGOING FEEDERS	
400A 4P MCCB	2 Nos.
250A 4P MCCB	4 Nos.
160A 4P MCCB	4 Nos.
100A 4P MCCB	6 Nos.
63A 4P MCCB	12 Nos.
32A 4P MCCB	2 Nos.

415V SUB ACDB 1&2	
INCOMER FEEDERS	
MCCB 400 A, 4P	2 Nos
MCCB 250A, 4P	1 Nos
BUS COUPLER	
ACB 600A, 4P	1 Nos
OUTGOING FEEDERS	
100A 4P MCCB	6 Nos.
63A 4P MCCB	14 Nos.
32A 4P MCCB	10 Nos.
16A 4P MCCB	6 Nos.
16A 2P, MCB	42 Nos.

415V MLDB	
INCOMER FEEDERS	
MCCB 200 A, 4P	2 Nos
BUS COUPLER	
MCCB 200A, 4P	1 Nos
OUTGOING FEEDERS	
100A 4P MCCB	4 Nos.
63A 4P MCCB	12 Nos.
32A 4P MCCB	8 Nos.

415V ELDB	
INCOMER FEEDERS	
MCCB 63 A, 4P	2 Nos
BUS COUPLER	
MCCB 63A, 4P	1 Nos
OUTGOING FEEDERS	
32A 2P, MCCB	2 Nos.
16A 2P, MCB	16 Nos.

415V HVAC DB	
INCOMER FEEDERS	
MCCB 100 A, 4P	1 Nos
OUTGOING FEEDERS	
63A 4P, MCCB	4 Nos.

415V MCB DB	
INCOMER FEEDERS	
MCCB 100 A, 4P	1 Nos
OUTGOING FEEDERS	
63A 4P, MCCB	4 Nos.

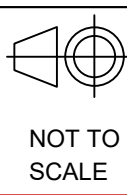
BILL OF QUANTITY				
S.NO.	ITEM/ DESCRIPTION	Unit	BOQ QTY	REQ QTY
1		Set		
2	Sub AC Distribution Board [Sub-ACDB]	Set	2	2
3	Main Lighting Distribution Board [MLDB]	Set	1	1
4	Emergency Lighting Distribution Board [ELDB]	Set	1	1
5	HV AC Distribution Board [HVAC DB]	Set	1	1
		Set		
7	DC DISTRIBUTION BOARD [DCDB]	Set	2	2

LEGEND :-	
SYMBOL	DESCRIPTION
	STATION SERVICE TRANSFORMER
	Air Circuit Breaker (ACB) (Motor Operated Spring Charged, Manually Drawout)
	MOULDED CASE CIRCUIT BREAKER (MCCB)
	CURRENT TRANSFORMER
	INDICATION LAMP
	HRC FUSE
	SPARE TERMINAL
	MULTI FUNCTION METER WITH MODBUS COMMUNICATION PROTOCOL.
	VOLTAGE SELECTOR SWITCH
	AMMETER SELECTOR SWITCH
	ANALOGUE AMMETER
	ANALOGUE VOLTMETER
	UNDER VOLTAGE RELAY
	INSTANTANEOUS OVER CURRENT RELAY
	INSTANTANEOUS EARTH FAULT RELAY
	IDMT NON- DIRECTIONAL OVER CURRENT RELAY
	IDMT NON- DIRECTIONAL EARTH FAULT RELAY
	LOCK OUT RELAY HAND RESET
	DRAW OUT
	ELECTRICAL SPRING CHARGE AND MANUAL DRAW OUT
	VOLTAGE TRANSDUCER (4-20mA)
	CABLE TERMINATION
	STATION SERVICE TRANSFORMER
	LIGHTING TRANSFORMER

- NOTES**
- ALL PROTECTION AND WIRING SHALL BE AS PER AEGCL TECHNICAL SPECIFICATION, WILL BE TAKEN CARE IN RESPECTIVE MANUFACTURE DRAWING AFTER APPROVAL OF LT AC/DG SLD.
 - BURDEN OF CT'S ARE SUBJECT TO CONFIRMATION OEM VENDERS.
 - INCOMING AND OUTGOING FEEDERS OF 415V MAIN ACDB SHALL BE PROVIDED WITH VISUAL ALARM ARRANGEMENT FOR TRIPPING.
 - ALL PROTECTION AND WIRING SHALL BE AS PER TECHNICAL SPECIFICATION, WILL BE TAKEN CARE IN RESPECTIVE MANUFACTURE DRAWING AFTER APPROVAL OF LT SLD.
 - ACB SHALL BE PROVIDED WITH ON/ OFF/TRIP/ TRIP CIRCUIT HEALTHY/TEST/SERVICE/SPRING CHARGED INDICATION LAMPS.
 - CONTROL SUPPLY FOR THE AIR CIRCUIT BREAKERS SHALL BE 220V DC.
 - PROTECTIVE RELAYS SHALL BE ELECTRO MECHANICAL/NUMERICAL TYPE HAVING IEC 61850 COMMUNICATION PROTOCOL.
 - THE DB SHALL COMPLY WITH THE TECHNICAL SPECIFICATION OF AEGCL.
 - CABLE ENTRY TO THE DB SHALL BE FROM THE BOTTOM.
 - THE DB SHALL HAVE ENCLOSURE PROTECTION CLASS OF NOT LESS THAN IP 52.
 - THE CONSTRUCTION OF THE DB SHALL BE SUCH THAT TEMPERATURE RISE AT NO PART OF THE DB SHALL EXCEED THE LIMITS SPECIFIED IN IS / IEC 60947.
 - THE PANEL PAINTING SHALL BE RAL 7002 (POURING GRAY).
 - CABLE SIZE SHOWN ARE TENTATIVE AND SHALL BE FINALIZED AFTER CABLE SIZING & LOAD LIST.
 - MAKE LIST OF ALL THE EQUIPMENT OF LT PANELS SHALL BE AS PER BID DOCUMENT.

NOA No. :	
PROJECT :	Upgradation of existing 220/132/33kV GIS to 400kV level
CLIENT:	ASSAM ELECTRICITY GRID CORPORATION LTD (BIJULEE BHAWAN, GUWAHATI, ASSAM)
EPC CONTRACTOR	
DRG. TITLE	LT AC SINGLE LINE DIAGRAM
DRG. NO.	
DRAWN BY:-	CHECK BY:-
DATE	SHEET
	01 OF 02

Rev. No.	Date	Revision Note



NOT TO SCALE