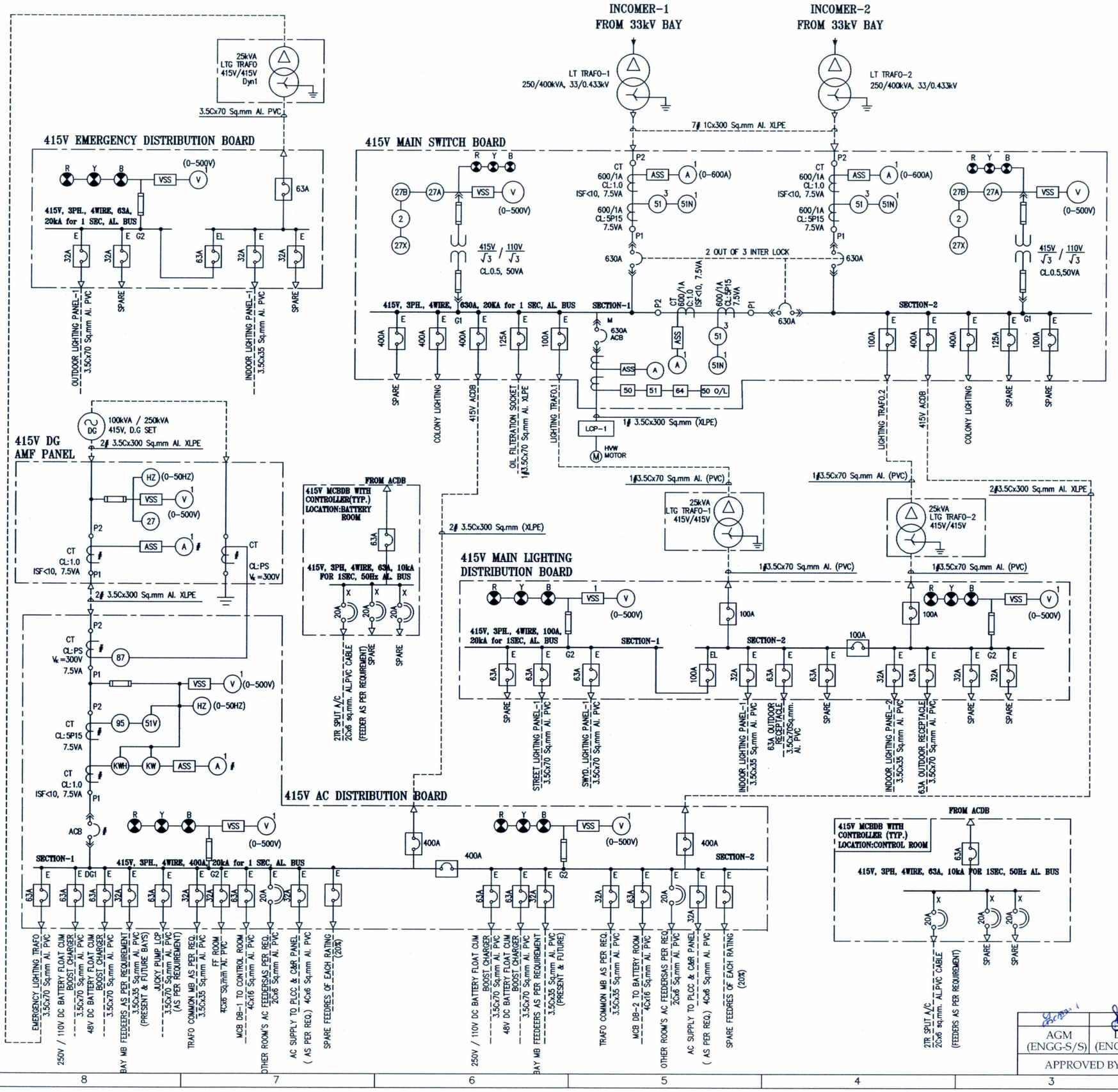


LEGEND:

SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
	DRAWOUT TYPE THREE POLE (3) AIR CIRCUIT BREAKER	51N	IDMT EARTH FAULT RELAY
	NON DRAWOUT TYPE FOUR POLE (4) MOULDED CASE CIRCUIT BREAKER	51V	VOLTAGE CONTROLLED DEFINITE TIME OVER CURRENT RELAY
	HRC FUSE	50/0/L	OVER LOAD RELAY
DG	DIESEL GENERATOR SET	95	OVERLOAD ALARM RELAY
V	VOLTMETER	2	TIMER
A	AMMETER		TWO POLE AC MCB (D CURVE)
VSS	VOLTMETER SELECTOR SWITCH	27A 27B	UNDER VOLTAGE RELAY
ASS	AMMETER SELECTOR SWITCH	27X	VOLTAGE MONITORING RELAY
kW	KILOWATT METER	87	DIFFERENTIAL RELAY
kWh	KILOWATT HOUR METER		VOLTAGE TRANSFORMER
	CURRENT TRANSFORMER		DRY TYPE LIGHTING TRANSFORMER
HZ	FREQUENCY METER		
51	IDMT OVER CURRENT RELAY		CABLE TERMINATION

NOTES:-

1. NO TWO AC SOURCES SHALL BE PARALLELED AT ANY STAGE.
2. DG SET SHALL BE OF AUTO START TYPE.
3. INTERLOCKING OF BREAKER SHALL BE PROVIDED TO PREVENT PARALLEL OPERATION OF DG SET WITH NORMAL STATION SUPPLY.
4. 1PH & 3PH AC SUPPLY FOR ALL THE BAY EQUIPMENTS SHALL BE FED FROM THE BMK.
5. EACH BAY MB & TRANSFORMER MB SHALL BE FED BY ATLEAST ONE SOURCE FROM 415V ACDB. SECOND SOURCE SHALL BE LOOPED FROM NEAREST BAY MB & TRANSFORMER MB WHICH SHALL BE FED FROM ANOTHER FROM 415V ACDB.
6. NUMBERS OF FEEDERS SHALL BE INCREASED IN EACH BOARD AS PER REQUIREMENT OF SUB-STATION
7. RATING OF BUS BARS/ FEEDERS INDICATED IN THIS DRAWING ARE MINIMUM REQUIREMENT AND MAY BE INCREASED DURING DETAIL ENGINEERING IF FOUND INADEQUATE WITH RESPECT TO LOADS / SYSTEM
8. AUTOMATIC SUPPLY CHANGE OVER SHALL BE ACHIEVED AS PER TECHNICAL SPECIFICATION, SECTION-LT SWITCHGEAR
9. # :
   a. CT RATIO DETAILS FOR DG SET PROTECTION:
      200/1A-FOR 100KVA
      400/1A-FOR 250KVA
   b. AMMETER METER RANGE FOR DG SET:
      0-200A-FOR 100KVA
      0-400A-FOR 250KVA
   c. ACB RATING FOR DG SET:
      250A-FOR 100KVA
      630A-FOR 250KVA
10. FEEDERS IN MSB FOR HVW MOTOR SHALL BE PROVIDED WHERE HVWS SYSTEM IS ENVISAGED

FOR TENDER PURPOSE ONLY

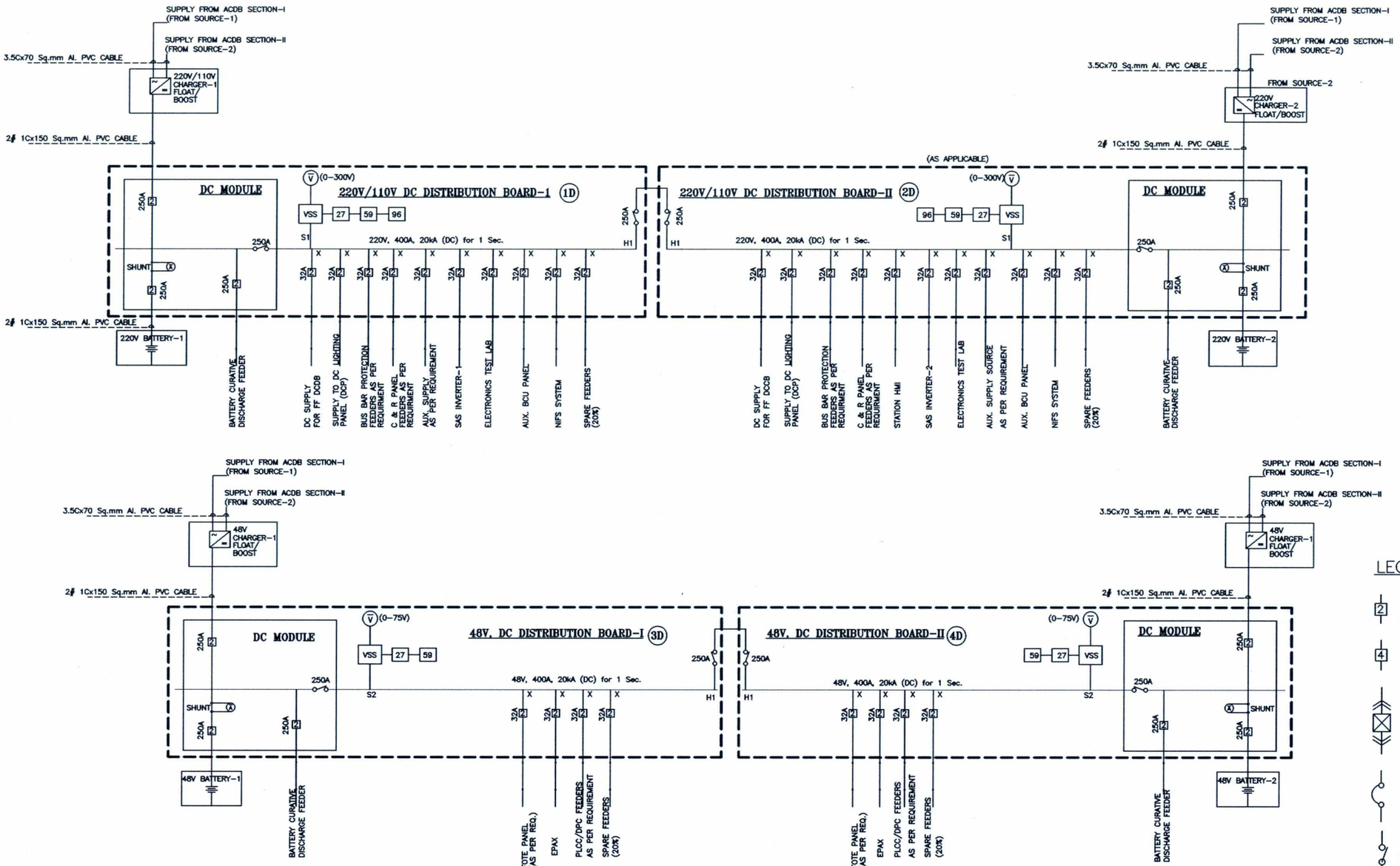
POWER GRID CORPORATION OF INDIA LIMITED

(A GOVERNMENT OF INDIA ENTERPRISE)

PROJECT: FOR 220KV & 132KV NEW SUBSTATION

TITLE: SLD FOR AC & DC SYSTEM

AGM (ENGG-S/S)	DGM (ENGG-S/S)			N.T.S	DRG.NO.	REV.
APPROVED BY	DATE	PRPD	CHKD	SCALE	C/ENGG/NER/AC/SLD/01 (SHEET 1 OF 2)	00



NOTES:

1. NO TWO AC SOURCE SHALL BE PARALLED AT ANY STAGE.
2. DG SET SHALL BE AUTO START TYPE.
3. EACH BAY MB & TRANSFORMER MB SHALL BE FED BY ATLEAST ONE SOURCE FROM 415V ACDB. SECOND SOURCE SHALL BE LOOPED FROM NEAREST BAY MB & TRANSFORMER MB RESPECTIVELY, WHICH SHALL BE FED FROM ANOTHER SOURCE FROM 415V ACDB.
4. NUMBER OF FEEDERS SHALL BE INCREASED IN EACH BOARD AS PER REQUIREMENT OF SUB-STATION FOR PRESENT & FUTURE BAYS AS SHOWN IN SUBSTATION SLD.
5. ONE DC 'X' TYPE MODULE IN EACH 220V/110V DCDB SHALL BE PROVIDED FOR EACH LINE, TRANSFORMER, BUS REACTOR, TBC, BC & BUS SECTION BAY FOR PRESENT & FUTURE BAYS AS SHOWN IN SUBSTATION SLD.
6. ONE DC 'X' TYPE MODULE IN EACH 48V DCDB SHALL BE PROVIDED FOR EACH LINE BAY FOR PRESENT & FUTURE BAYS AS SHOWN IN SUBSTATION SLD.
7. RATING OF BUS BARS/ FEEDERS INDICATED IN THIS DRAWING ARE MINIMUM REQUIREMENT AND MAY BE INCREASED DURING DETAILED ENGINEERING IF FOUND INADEQUATE WITH RESPECT TO OFFERED LOADS / SYSTEM.
8. ALL DIGITAL/ANALOGUE INPUT/OUTPUTS REQUIRED FOR SAS SYSTEM SHALL BE CONSIDERED BY THE LT SWITCHGEAR MANUFACTURER.
9. THIS DRAWING SHALL BE APPLICABLE WITH REV.05 OF STANDARD TECHNICAL SPECIFICATION OF LT SWITCHGEAR.

LEGEND:

- 2 POLE MCCB
- FOUR POLE MCCB
- AIR CIRCUIT BREAKER
- 2 POLE MCB
- AIR BREAK SWITCH

FOR TENDER PURPOSE ONLY

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PROJECT: FOR 220KV & 132KV NEW SUBSTATION

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AGM (ENGG-S/S)	DGM (ENGG-S/S)				N.T.S	DRG.NO.	REV.
APPROVED BY		DATE	PRPD	CHKD	SCALE	C/ENGG/NER/AC/SLD/01 (SHEET 2 OF 2)	00