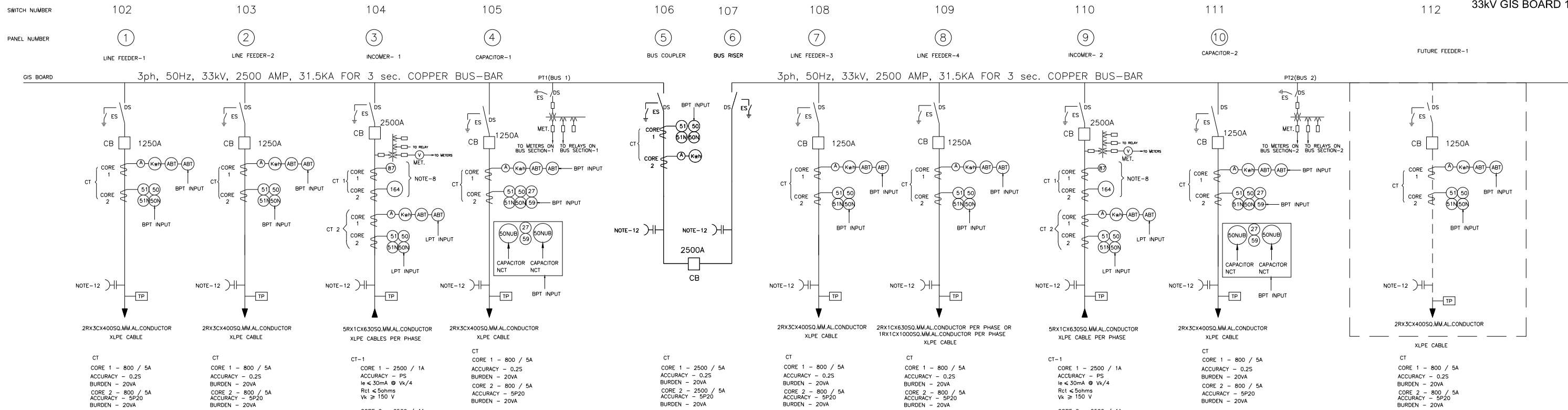


ANNEXURE 1B
33kV GIS BOARD 10 AT AAREY



CT
CORE 1 - 800 / 5A
ACCURACY - 0.2S
BURDEN - 20VA
CORE 2 - 800 / 5A
ACCURACY - 5P20
BURDEN - 20VA

CT
CORE 1 - 800 / 5A
ACCURACY - 0.2S
BURDEN - 20VA
CORE 2 - 800 / 5A
ACCURACY - 5P20
BURDEN - 20VA

CT-1
CORE 1 - 2500 / 1A
ACCURACY - PS
le < 30mA @ V_k/4
R_{ct} < 5ohms
V_k ≥ 150 V

CT-2
CORE 1 - 2500 / 5A
ACCURACY - 0.2S
BURDEN - 20VA
CORE 2 - 2500 / 5A
ACCURACY - 5P20
BURDEN - 20VA

PT
CORE 1 - 33/√3kV / 110/√3V
ACCURACY - 0.2
BURDEN - 25VA
CORE 2 - 33/√3kV / 110/√3V
ACCURACY - 3P
BURDEN - 25VA
CORE 3 - OPEN DELTA
ACCURACY - 3P
BURDEN - 25VA

PT1 (BUS 1)
CORE 1 - 33/√3kV / 110/√3V
ACCURACY - 0.2
BURDEN - 25VA
CORE 2 - 33/√3kV / 110/√3V
ACCURACY - 3P
BURDEN - 25VA
CORE 3 - OPEN DELTA
ACCURACY - 3P
BURDEN - 25VA

PT2 (BUS 2)
CORE 1 - 33/√3kV / 110/√3V
ACCURACY - 0.2
BURDEN - 25VA
CORE 2 - 33/√3kV / 110/√3V
ACCURACY - 3P
BURDEN - 25VA
CORE 3 - OPEN DELTA
ACCURACY - 3P
BURDEN - 25VA

LEGEND :-

- (51) IDMT PHASE OVER CURRENT RELAY
- (50) INSTANTANEOUS PHASE OVER CURRENT RELAY
- (51N) IDMT EARTH FAULT RELAY
- (50N) INSTANTANEOUS EARTH FAULT RELAY
- (87) TRANSFORMER DIFFERENTIAL RELAY
- (V) CAPACITIVE VOLTAGE INDICATOR
- (TP) TEST PLUG
- (164) RESTRICTED EARTH FAULT RELAY (33 kV SIDE OF TRANSFORMER)
- (59) OVER VOLTAGE PROTECTION
- (27) UNDER VOLTAGE PROTECTION
- (50N/5) NEUTRAL UNBALANCE PROTECTION
- (A) AMMETER
- (V) VOLT METER
- (W) ENERGY METER
- (ABT) ABT METER

NOTES:-

- ALL CB'S, DISCONNECTOR AND EARTHING SWITCHES SHALL BE MOTOR OPERATED.
- EACH FEEDER SHALL HAVE BAY CONTROLLER CUM PROTECTION IEDs AS PER TECHNICAL SPECIFICATION
- BAY IEDs SHALL BE SUITABLE FOR AUXILIARY SUPPLY OF 220 V DC.
- REVERSE BLOCKING SCHEME TO BE PROVIDED.
- COMMUNICATION PROTOCOL OF BAY IEDs SHALL BE IEC 61850. IT SHALL HAVE 2 NOS. OF FO PORT FOR SCADA COMMUNICATION
- 33kV BAY IEDs SHALL BE INTERFACED WITH EXISTING ABB MAKE SAS FOR CONTROL AND MONITORING.
- 33kV BAY IEDs SHALL BE CONNECTED TO THE ETHERNET BUS PROVIDED BY SAS VENDOR . BIDDER SHALL CONSIDER FO PATCHCORDS FORM IEDs TO ETHERNET SWITCHES PROVIDED BY SAS VENDOR. THESE SWITCHES WILL BE LOCATED NEAR 33kV SWITCHGEAR
- DIFFERENTIAL RELAY 87 AND REF RELAY 164 SHOWN ON INCOMER PANEL SHALL BE PART OF 220KV PROTECTION SCHEME AND NOT UNDER SCOPE OF THIS PACKAGE
- 1 kWh METER & 2 NOS. ABT METER TO BE SUPPLIED FOR ALL FEEDERS EXCEPT BUS COUPLER & CAPACITORS
- PT PRIMARY SHALL BE PROVIDED WITH DISCONNECTOR AND EARTHING FACILITY.
- TRANSFORMER DIFFERENTIAL RELAY SHALL ALSO BE SUITABLE FOR LV SIDE REF & SEF PROTECTION.
- CAPACITIVE VOLTAGE DETECTION FOR CABLE TO BE PROVIDED AT FRONT & REAR SIDE OF PANEL
- SWITCHGEAR SHALL BE EXTENDABLE AT BOTH ENDS
- DUMMY PLUG SUITABLE TO WITHSTAND RATED VOLTAGE SHALL BE SUPPLIED FOR ALL CABLE SOCKET, PT SOCKETS & TEST SOCKET
- LOCATION OF BOARD TO BE INSTALLED IS AT GROUND FLOOR

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PROJECT: 33kV AIS TO GIS CONVERSION AT AAREY, VERSOVA & GHODBUNDER

TITLE: SLD OF 33kV GIS BOARD-10 AT 220KV AAREY EHV S/S

DWGTD-SLD-600-AAREY-2-R1 REV R1