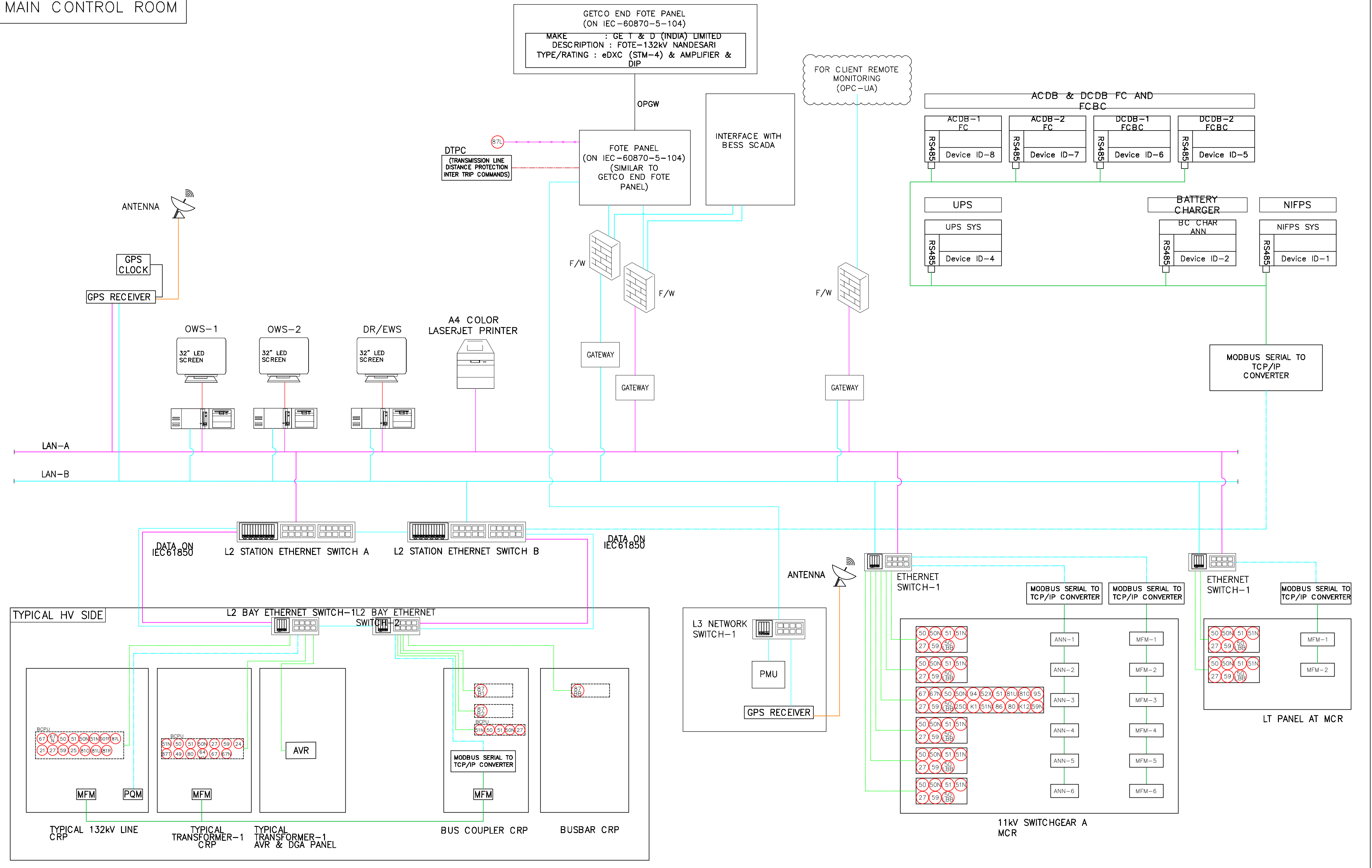


MAIN CONTROL ROOM



LEGEND:

- DATA HIGHWAY
- CAT-5 CABLE
- CAT-6 CABLE
- RS485 CABLE
- FIBER OPTIC PATCH CABLE
- HARDWARE CABLE
- HDMI CABLE
- IRIG-B CABLE
- OPGW CABLE
- FIBER OPTIC CABLE

ABB REVIATIONS:


- GPS GLOBAL POSITIONING SYSTEM
- EWS ENGINEERING WORK STATION
- OWS OPERATING WORK STATION
- UPS UNINTERRUPTED POWER SUPPLY
- ACDB AC DISTRIBUTION BOARD
- LIU LINE INTERFACE UNIT
- MFM MULTIFUNCTION METER
- FAS FIRE ALARM SYSTEM
- F/W FIREWALL
- PMU PHASE MONITORING UNIT
- SAS SUBSTATION AUTOMATION SYSTEM
- DR DISTURBANCE RECORDER
- BCPU BAY CONTROL & PROTECTION UNIT
- CRP CONTROL RELAY PANEL
- AVR AUTOMATIC VOLTAGE REGULATION
- DGA DISSOLVED GAS ANALYSIS
- PMU PHASOR MEASUREMENT UNIT
- NIFPS NITROGEN INJECTION FIRE PROTECTION SYSTEM
- DG DIESEL GENERATOR
- SAS SUBSTATION AUTOMATION SYSTEM
- ACDB ALTERNATING CURRENT DISTRIBUTION BOARD
- DCDB DIRECT CURRENT DISTRIBUTION BOARD
- HVAC HEATING VENTILATION AND AIR CONDITIONING
- SUX STATION AUXILIARY PANEL
- PQM POWER QUALITY METER
- OPC/UA OPEN PLATFORM COMMUNICATIONS UNIFIED ARCHITECTURE
- ANN ANNUNCIATOR

NOTES:

1. THIS DIAGRAM SHOWS GENERAL CONCEPT OF OVERALL SYSTEM CONFIGURATION IT HAS TO BE READ IN CONJUNCTION WITH SPECIFICATIONS. FURTHER DETAIL OF EQUIPMENT SHALL BE DEVELOPED DURING DETAILED ENGINEERING.
2. AUXILIARY BCU AT SUBSTATION LEVEL IS USED TO INTERFACE THE AC, DC, FIREFIGHTING SYSTEMS WITHIN THE SUBSTATION ON SOFT AND HARDWIRED CONNECTIONS DETAILED CONNECTIVITY AND AUXILIARY SYSTEMS SHALL BE FINALIZED DURING DETAILED ENGINEERING.
3. COMMUNICATION WITH 3RD PARTY SCADA SYSTEM/MONITORING SYSTEM LIKE BESS SCADA, TRANSFORMER MONITORING SYSTEM ETC., AND EXCHANGE INFORMATION FOR STATUS UPDATE AND CONTROL BETWEEN SAS AND 3RD PARTY SCADA SYSTEMS.
4. PLEASE NOTE THAT THERE MAY BE CHANGE IN SCADA ARCHITECTURE AND IT WILL BE INFORMED TO BIDDER. BIDDER TO CONSIDER THE SAME.
5. OPC-UA SERVER IS CONSIDERED FOR CLIENT REMOTE MONITORING OF BESS SCADA & SAS SYSTEM.

REFERENCE:

ANNEXURE-2 KEY SLID

CLIENT:
 **GUJARAT INDUSTRIES POWER COMPANY LIMITED (M/s GIPCL)**

PROJECT:
DEVELOPMENT OF 20 MW/20 MWH VFRB PROJECT AT GIPCL VADODARA COMPLEX

TITLE:
TENDER DRAWING - SAS FOR SUBSTATION

DEPT.	JOB NO.	SCALE:	SHEET: 01 OF 01	REV.

DWG.NO.:- DWG - 07