



NOTES:

1. BRPL SCOPE OF WORK:
- INCLUSION:
- A. DESIGN, SUPPLY AND ETC OF ELECTRICAL EQUIPMENTS AND SYSTEMS INSIDE BRPL'S GIS ROOM, CONTROL ROOM, BATTERY ROOM AND MAINTENANCE ROOM.
- EXCLUSION:
- A. COMPLETE CIVIL MATERIAL PROCUREMENT & CONSTRUCTION
 - B. CONCEALED CONDUITING
- TERMINAL POINT:
- A. OUTGOING OF 66KV BRPL'S GIS TO SAU'S 66KV CABLE. GIS TERMINATION KIT WILL BE SUPPLIED AND TERMINATED BY BIDDER.
 - B. TWO NOS. 415V AC SUPPLY FROM SAU FOR AUXILIARY STATION LOAD
 - C. SAU WILL PROVIDE CONCEALED CONDUIT WITH INTERNAL WIRE AND JUNCTION BOX FOR ILLUMINATION, VENTILLATION AND RECEPTACLE WITH PROVISIONING OF POINTS UPTO DB IN BRPL CONTROL ROOM. BIDDER SHALL DESIGN, PROCURE AND INSTALL LIGHTS WITH LIGHTING FIXTURES AND CEILING/WALL/EXHAUST FAN/RECEPTACLE, DB/LDB/EDB AND LAY CABLE BETWEEN DB/LDB/EDB TO ACDB.
 - D. BIDDER WILL PROVIDE CIVIL DRAWING OF TRENCH DESIGN AFTER AWARD OF CONTRACT. SAU WILL CONSTRUCT ALL TRENCH RELATED CIVIL WORK INCLUDING SUPPRTING CHANNELS, ANGLES, HANGERS & INSERT PLATES ETC. AS PER BRPL'S DRAWING. CABLE TRAYS & TRENCH COVERS SHALL BE IN BIDDER'S SCOPE.
 - E. BIDDER WILL DO PRIMARY (BELOW GROUND) AND SECONDARY EARTHING (EQUIPMENT) AS PER APPROVED CALCULATION.
 - F. BIDDER WILL PROVIDE COMPLETE FIRE DETECTION AND PROTECTION SYSTEM AND DSLP SYSTEM.
 - G. BIDDER WILL LAY CONTROL CABLE BETWEEN BRPL'S ROOM AND ADJOINING SAU'S ROOM FOR LINE DIFFERENTIAL PROTECTION. BIDDER SHALL CONSIDER INTERPOSING CT TO MATCH CT RATIO IF REQUIRED.

LEGEND	
	POWER CIRCUIT
	CONTROL CIRCUIT
	BUSBAR
	LIGHTNING ARRESTOR
	3 POSITION MOTORISED ISOLATOR WITH EARTH
	POTENTIAL TRANSFORMER
	MOTORISED EARTH SWITCH
	CURRENT TRANSFORMER
	BUSHING CURRENT TRANSFORMER
	SF6 CIRCUIT BREAKER
	POWER TRANSFORMER
	FUSE
	DRAWOUT TYPE VACUUM CIRCUIT BREAKER
	UNDER VOLTAGE PROTECTION
	OVER VOLTAGE PROTECTION
	MULTI FUNCTION METER
	POWER QUALITY ANALYSER
	ENERGY METER
	CONSUMER ENERGY METER
	AMMETER SELECTOR SWITCH
	AMMETER
	VOLTAGE SELECTOR SWITCH
	VOLTMETER
	TEST TERMINAL BLOCK
	LINE DIFFERENTIAL PROTECTION
	DISTANCE PROTECTION
	SYNC-CHECK RELAY
	RESTRICTED EARTH FAULT
	TAP POSITION & RAISE/LOW ON OLTC
	DIFFERENT SWITCHES ON POWER TRANSFORMER - HV WTI, LV WTI, OTI, Main Tank OSR, SPR, PRV, Buchholz, MOG, OLTC OSR trip, OLTC Out of Step/Stuck Up/Motor trip
	NEUTRAL DISPLACEMENT PROTECTION
	DIRECTIONAL OVERCURRENT & EARTH FAULT
	OVERCURRENT & EARTH FAULT
	BROKEN CONDUCTOR PROTECTION
	SF6 ABNORMAL PRESSURE PROTECTION
	LOCAL BREAKER BACKUP PROTECTION
	LOCK OUT RELAY
	ANTIPUMPING RELAY
	BREAKER CONTACT MULTIPLIER
	TRIP CIRCUIT SUPERVISION RELAY

												BSES BSES Rajdhani Power Limited		BSES Rajdhani Power Limited BSES BHAWAN Nehru Place, New Delhi - 110017	
02	PROTECTION PART AND SCOPE/TERMINAL POINTS UPDATED	03.11.17	AK	US	AS	VP	DRAWN	AK	TITLE:- SLD OF 66/11KV SUBSTATION (GIS) AT SAU, MAIDANGARHI						
01	REVISED AS SAU COMMENTS DT 15.04.15	15.05.15	AK	US	AS	KA	CHECKED	AS							
00	AS PER DISCUSSION WITH SAU CONSULTANT - SENT TRD SAU FOR COMMENTS	16.01.15	AK	US	AS	KA	APPD.	VP							
REV. No.	DESCRIPTION	DATE	PRPD. BY	CHKD. BY	APPR. BY	SCALE	DATE	NTS	DWG No.:- BRPL-SAU-DEE-B-0003	SHEET 1 OF 1	REV. 02	VER. 00			