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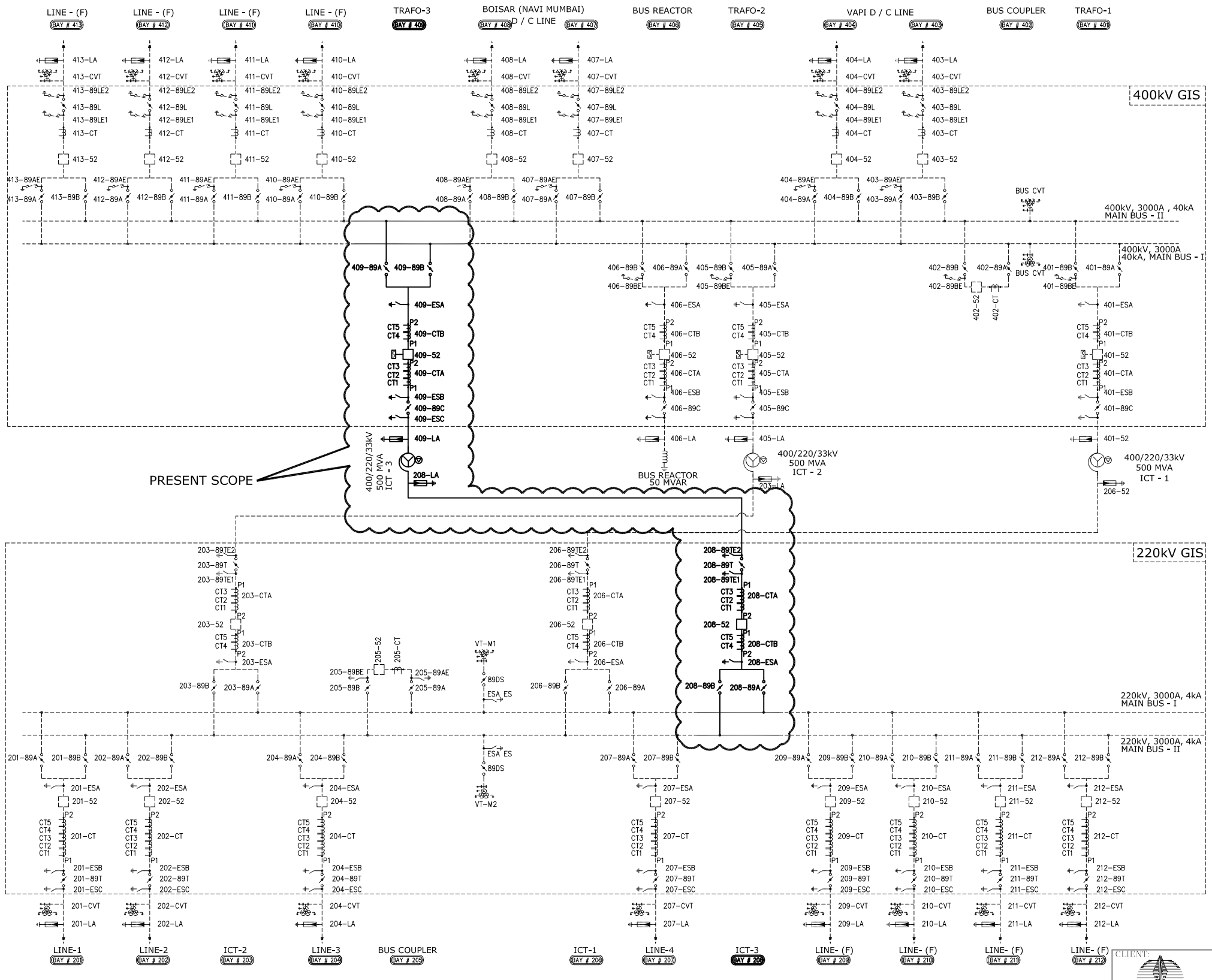

BILL OF QUANTITY 400kV SYSTEM

SL. No.	DESCRIPTION	SYM.	UNIT	QTY.
1.	500MVA, 400/220/33KV AUTO TRANSFORMER		No.	01
2.	400kV, 2000A, 40kA, SF6 GIS ICT FEEDER BAY MODULE		Set.	01
3.	400kV SF6 AIR BUSHING		Nos.	03
4.	336KV SURGE ARRESTER (1–PHASE)		Nos.	03
5.	CONTROL SWITCHING DEVICE		Nos.	01

BILL OF QUANTITY 220kV SYSTEM

SL.No.	DESCRIPTION	SYM.	UNIT	QTY.
1.	245kV, 1600A, 40kA, SF6 GIS ICT FEEDER BAY MODULE		Set.	01
1.	220kV SF6 AIR BUSHING		Nos.	03
2.	216KV SURGE ARRESTER (1–PHASE)		Nos.	03

SYSTEM PARAMETERS:-

Sl.No.	DESCRIPTION	400kV SYSTEM	220kV SYSTEM
1.	SYSTEM OPERATING VOLTAGE	400kV	220kV
2.	MAX. OPERATING VOLTAGE OF THE SYSTEM (rms)	420kV	245kV
3.	RATED FREQUENCY	50Hz	50Hz
4.	NO. OF PHASES	3	3
5.	RATED 3–PH. SYMMETRICAL SHORT CIRCUIT CURRENT WITHSTAND CAPACITY	40kA/1sec.	40kA/1sec.
6.	SYSTEM NEUTRAL EARTHING	EFFECT. EARTHED	EFFECT. EARTHED
7.	AUXILIARY POWER SUPPLY i. A.C.	415V 3Ph. or 1Ph. 240V.	
	ii. D.C.	220V	
8.	CREEPAGE DISTANCE	31mm/kV	31mm/kV

EQUIPMENT DESIGNATION FOR SLD

2/4	1	89	A/B/C/L/T/BR/LR	E

- E — EARTH SWITCH
- A/B/C/L/T/BR/LR — A–EQUIPMENT CONNECTED TO BUS–1; B–EQUIPMENT CONNECTED TO BUS–2; C–DEVICE CONNECTED TO TRANSFER BUS; L–DEVICE CONNECTED TO LINE SIDE; T–EQUIPMENT CONNECTED TO TRANSFORMER; BR–DEVICE CONNECTED TO BUS REACTOR; LR–DEVICE CONNECTED TO LINE REACTOR
- 89 — EQUIPMENT IDENTIFICATION (ISOLATOR)
- 1 — BAY NO. :01,02..N
- 2/4 — VOLTAGE LEVEL –220/400kV

LEGEND:

——— – PRESENT SCOPE

- - - - - - - - – EXISTING/FUTURE

CLIENT:

POWERGRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)

"Saudamani" Plot No–2, Sector–29, Gurgoan–122001, Haryana

PROJECT: SUBSTATION PACKAGE - SS01:- EXTENTION OF 400/220kV KALA S/S UNDER WESTERN REGION STRENGTHENING SCHEME -17

NAME OF SUBSTATION: 400/220kV KALA

NOA No.: CC–CS/731–WR2/GIS–3382/3/G1/NOA–II/7173 & 7174 Dated 27.02.2017

TITLE: 400/220kV SINGLE LINE DIAGRAM

REV.No.	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED	STATUS
		Name				
		Date				
		Sign.				
R1	REVISED AS PER PGCIL COMMENTS DTD.04.05.17	Name	YGB	GSR	VDSP	FOR APPROVAL
		Date	13.07.17	13.07.17	13.07.17	
		Sign.				
R0	FIRST ISSUE	Name	YGB	GSR	VDSP	CAT–V
		Date	04.05.17	04.05.17	04.05.17	
		Sign.				

REFERENCE No.	DESCRIPTION
G&B–SS01–KAL–E–LAY–002	400/220kV LAYOUT PLAN & SECTION
C/ENGG/WR/WRSS–17/KALA/SLD/400/220kV/01	SINGLE LINE DIAGRAM

A2 | GODREJ & BOYCE MFG. CO. LTD. PIROJSHANAGAR, VIKHROLI WEST, MUMBAI MAHARASTRA (INDIA).

DRAWING No. G&B–SS01–KAL–E–SLD–001

TOTAL SH. 001 | SH.No. 001 | REV. R1

SCALE NTS