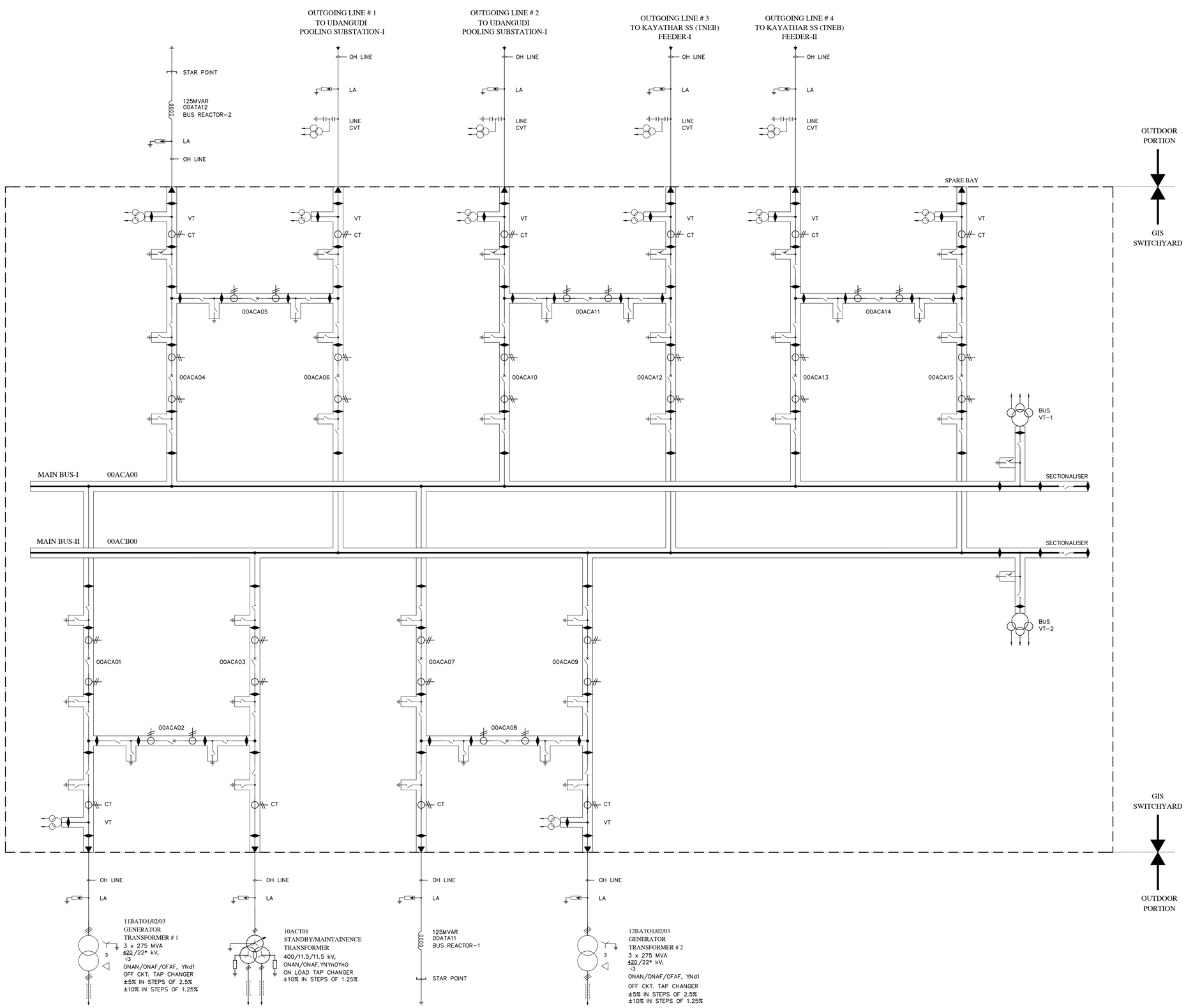

LEGEND:

- THREE-PHASE BANK OF SINGLE-PHASE TRANSFORMER, CONNECTION STAR-DELTA.
- THREE WINDING TRANSFORMER WITH ON LOAD TAP CHANGER
- LIGHTNING ARRESTER
- EARTH
- CURRENT TRANSFORMER (CT)
- ISOLATOR
- EARTH SWITCH
- FAST ACTING EARTH SWITCH
- CIRCUIT BREAKER (EHV)
- CAPACITOR VOLTAGE TRANSFORMER (CVT)
- ELECTRO MAGNETIC VOLTAGE TRANSFORMER (EMVT)
- BUS PT
- NGR — NEUTRAL GROUNDING RESISTOR
- REACTOR
- BUS DUCT
- GIS TERMINAL
- GIS BARRIER

SYSTEM DATA:

1.	SYSTEM VOLTAGE	400 kV
2.	HIGHEST SYSTEM VOLTAGE	420 kV
3	NO. OF PHASES	3
4.	FREQUENCY	50 Hz
5.	ONE MIN. POWER FREQUENCY WITHSTAND VOLTAGE	630kV(r.m.s)
6.	LIGHTNING WITHSTAND VOLTAGE	1425 kVP
7.	SWITCHING IMPULSE VOLTAGE	1050 kVP
8.	SHORT CIRCUIT LEVEL	63 kA FOR 1Sec.
9.	CREEPAGE DISTANCE	31 mm/kV
10.	TYPE OF EARTHING	SOLIDLY GROUNDED
11.	LA	390 KV
12.	BREAKER RATING	2000 A
13.	ISOLATOR RATING	2000 A
14.	BUS RATING	4000 A
15.	SECTIONALISER RATING	4000 A

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH TECHNICAL SPECIFICATION.
2. THE REQUIREMENT SHOWN ARE MINIMUM ONLY. AS PER SYSTEM REQUIREMENT ALL NECESSARY EQUIPMENTS/DEVICES SHALL BE PROVIDED.

REV.	DATE	DESCRIPTION	DRN.	STR.	MECH.	ELEC.	INST.
0	18.05.15	FOR TENDER PURPOSE	CS			GS	

APPROVED BY

FICHTNER
Consulting Engineers
(India) Private Limited
Chennai

TAMIL NADU GENERATION AND DISTRIBUTION CORPORATION LTD
2x660MW UDANGUDI SUPERCRITICAL THERMAL POWER PROJECT-STAGE-1
UDANGUDI VILLAGE, TUTICORIN DISTRICT

	SIGNATURE	DATE
DRAWN	CS	04.05.15
DESIGNED	NR	05.05.15
CHECKED	GS	06.05.15
DEPT.HEAD	GS	07.05.15
PROJ.MGR.	VRN	08.05.15

TILTLE :
SINGLE LINE DIAGRAM FOR
400KV GIS SWITCHYARD (D-TYPE)

RELEASED FOR: PRELIMINARY / TENDER ✓ / ENGINEERING / CONSTRUCTION

DEPT. ELECTRICAL | JOB NO. 1115112 | SCALE: NTS | SHEET : 1 OF 1 | REV.

DWG.NO. 10-1115112-E-202 | 0