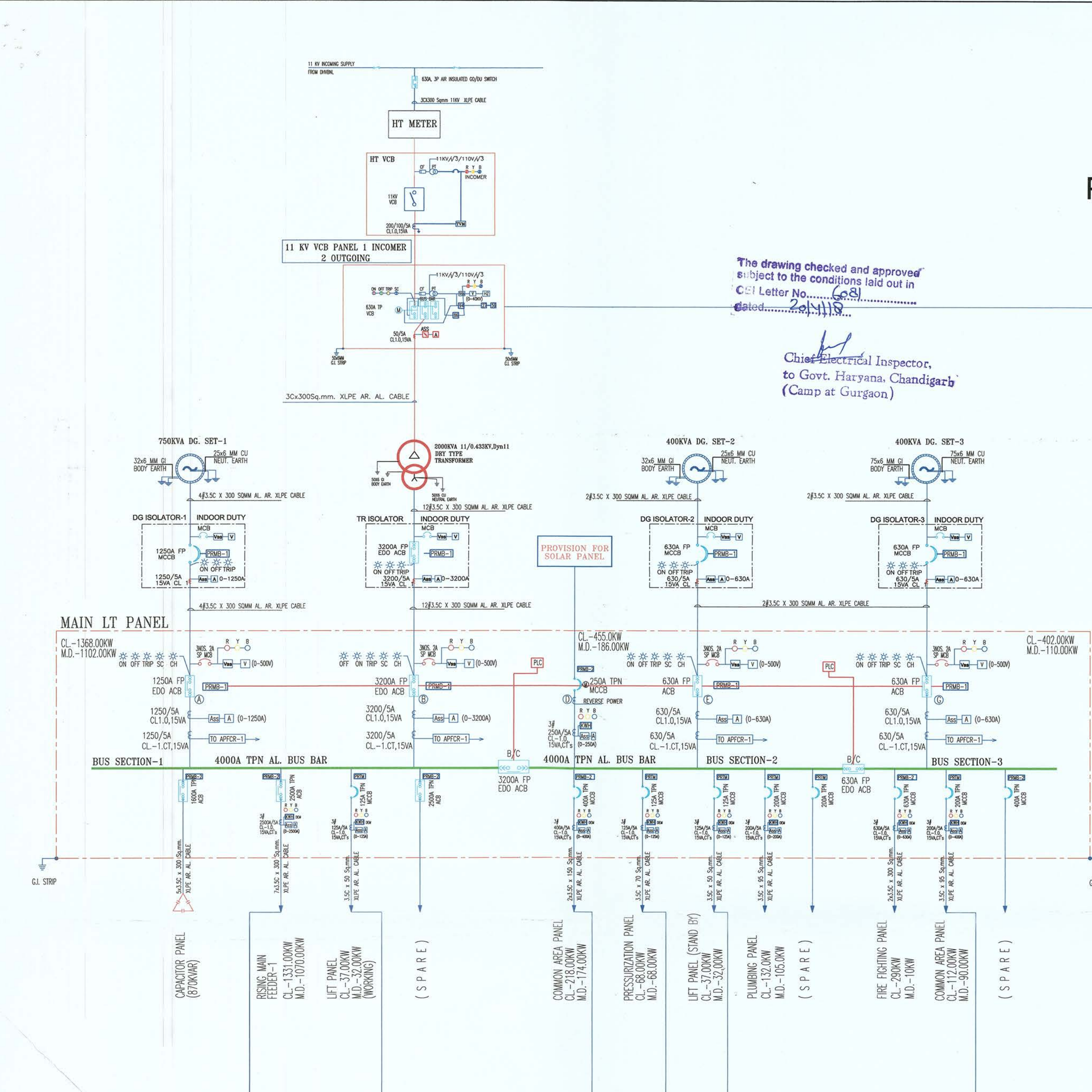
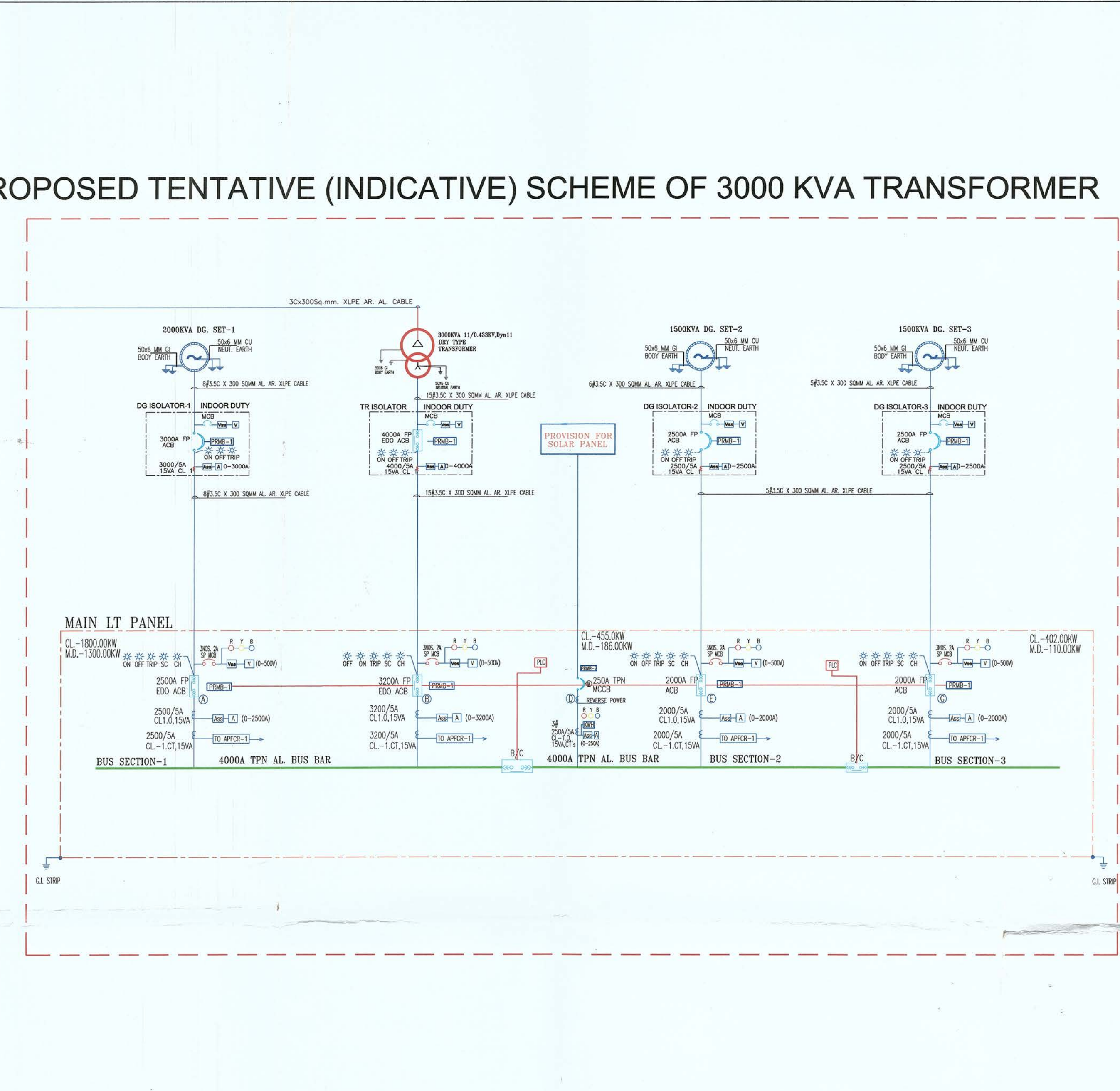




B BLOCK



PROPOSED A BLOCK

INTERLOCKING SCHEME WITH LOAD MANAGEMENT PLC WITH TRANSFORMER 2000 KVA & 750,400 & 400 DG SETS. FOR TAPASHYA COMMERCIAL COMPLEX AT GURGAON							
Sl No		LT panel Incoming Breakers, Bus Section-1		LT panel Incoming Breakers, Bus Section-2		LT panel Incoming Breakers, Bus Section-3	
	Conditions	"A"	"B"	"C"	"D"	"E"	"F"
1	When Grid Supply is Available-Normal	OFF	ON	OFF	ON	OFF	OFF
	When Grid Supply is not Available						
3	When demand load is less than 320kVA(When DG-3 is running)	OFF	OFF	ON	ON	OFF	ON
4	When demand load is less than 320kVA(When DG-2 is running)	OFF	OFF	ON	ON	ON	OFF
5	When demand load is less than 600kVA(When DG-1 is running)	ON	OFF	ON	ON	OFF	OFF
6	When demand load is less than 900kVA(When DG-1 & 2 are running)	ON	OFF	ON	ON	ON	OFF
7	When demand load is less than 1200kVA(When DG-1, 2 & 3 are running)	ON	OFF	OFF	ON	ON	ON
8	Incase of Fire and Grid supply is available	OFF	ON	ON	OFF	OFF	ON
9	Incase of Fire and Grid supply is not available	ON	OFF	ON	OFF	ON	ON
Note: Kindly refer SLD for breaker number.							
	DG Set-1	750 KVA					
	DG Set-2	400 KVA					
	DG Set-3	400 KVA					

INTERLOCKING SCHEME WITH LOAD MANAGEMENT PLC WITH TRANSFORMER 3000 KVA & 2000,1500 & 1500 DG SETS. FOR TAPASHYA COMMERCIAL COMPLEX AT GURGAON							
Sl No		LT panel Incoming Breakers, Bus Section-1		LT panel Incoming Breakers, Bus Section-2		LT panel Incoming Breakers, Bus Section-3	
	Conditions	"A"	"B"	"C"	"D"	"E"	"F"
1	When Grid Supply is Available-Normal	OFF	ON	OFF	ON	OFF	OFF
	When Grid Supply is not Available						
3	When demand load is less than 320kVA(When DG-3 is running)	OFF	OFF	ON	ON	OFF	ON
4	When demand load is less than 320kVA(When DG-2 is running)	OFF	OFF	ON	ON	ON	OFF
5	When demand load is less than 600kVA(When DG-1 is running)	ON	OFF	ON	ON	OFF	OFF
6	When demand load is less than 900kVA(When DG-1 & 2 are running)	ON	OFF	ON	ON	ON	OFF
7	When demand load is less than 1200kVA(When DG-1, 2 & 3 are running)	ON	OFF	OFF	ON	ON	ON
8	Incase of Fire and Grid supply is available	OFF	ON	ON	OFF	OFF	ON
9	Incase of Fire and Grid supply is not available	ON	OFF	ON	OFF	ON	ON
Note: Kindly refer SLD for breaker number.							
	DG Set-1	750 KVA					
	DG Set-2	400 KVA					
	DG Set-3	400 KVA					

LEGEND:	
	MINIATURE CIRCUIT BREAKER
	MOULDED CASE CIRCUIT BREAKER
	MOTORISED MOULDED CASE CIRCUIT BREAKER
	AIR CIRCUIT BREAKER
	MOTORISED AIR CIRCUIT BREAKER
	VACUUM CIRCUIT BREAKER (D.O.)
	FUSE
	POTENTIAL TRANSFORMER
	CURRENT TRANSFORMER
	AMMETER
	VOLTMETER
	AMMETER SELECTOR SWITCH
	VOLTMETER SELECTOR SWITCH
	POWER FACTOR METER
	ENERGY METER
	INDICATING LAMP
	ON OFF TRIP SC
	FREQUENCY METER
	O/C & EARTH FAULT RELAY
	OVER CURRENT & E/F RELAY
	UNDER VOLTAGE RELAY
	OVER VOLTAGE RELAY
	LOCK OUT RELAY
	AUXILIARY RELAY
	WINDING TEMP. ALARM/TRIP
	TRIP CIRCUIT SUPERV. RELAY
	ACTIVE & REACTIVE ENERGY METER
	MULTI-FUNCTION METER
	PROTECTION RELEASER MICROPROCESSOR BASED

Note

- ALL ALUMINIUM BUS BARS SHALL HAVE A SIZE OF MAXIMUM OF EITHER CURRENT DENSITY OF 1 AMP PER SQMM OR TO WITH STAND STRESSES OF INDICATED FAULT LEVEL, WHICHEVER IS HIGHER
- ALL 415 VOLT PANELS SHALL HAVE EXTENDED BUSBARS/CONTROL WIRING TERMINAL BLOCK TO FACILITATE EXTENSION WITH OUT SHUTTING DOWN PANEL
- ALL ACB'S AND BUSBAR ON 415 VOLT PANELS SHALL HAVE AN Ics VALUE OF 50 KA
- MICROPROCESSOR RELEASES FOR ACB'S ALL RELEASES SHALL BE SITE SETTABLE WITHIN RANGE STIPULATED
- ELECTRICAL INTERLOCKING TO ENSURE D.G. SUPPLY IS NOT PARALLELED WITH GRID
- ALL ACB/ MCCB FEEDER RATINGS SHALL BE "IN PANEL" RATING & APPROPRIATE FRAME SIZE SELECTED BY MANUFACTURER
- MCCB SHALL BE THERMAL MAGNETIC RELEASES UP TO 200A AND ABOVE 200A SHALL BE MICROPROCESSOR BASED RELEASES
- PROTECTION RELEASES MICROPROCESSOR BASED (PRMB) SHALL BE AS FOLLOWS

PRMB PROTECTION

- OVER CURRENT RANGE 40%-100% -WITH TIME SETTING
- SELECTIVE SHORT CIRCUIT 100%-1000% -WITH TIME SETTING
- INSTANTANEOUS SHORT CIRCUIT 150%-1200%
- EARTH FAULT WITH ADJUSTABLE RELAY 20%-100%
- UNDER VOLTAGE 60%-95% TIME SETTING
- OVER VOLTAGE 105%-120% TIME SETTING
- REVERSE POWER
- CURRENT UNBALANCE
- PHASE SEQUENCE

MEASUREMENTS

- CURRENT - PHASES, NEUTRAL
- VOLTAGE - PHASES, NEUTRAL
- POWER - ACTIVE, REACTIVE
- ENERGY - ACTIVE, REACTIVE
- POWER FACTOR
- FREQUENCY

CONNECTIVITY

- MODBUS CONNECTIVITY FOR ACB ON/OFF STATUS /PROTECTION PARAMETERS SET/FAULT TRIP SIGNALS

PRMB PROTECTION

- OVER CURRENT 40%-100% - TIME SETTING
- SHORT CIRCUIT 100%-1000% - TIME SETTING
- INSTANTANEOUS SHORT CIRCUIT 150%-1200%
- EARTH FAULT WITH ADJUSTABLE RELAY 20%-100% MEASUREMENT CURRENT

PRMB PROTECTION

- PROTECTION RELEASES THERMAL MAGNETIC BASED
- RELEASE (THERMAL-MAGNETIC BASED)
- PRMB-UP TO 200A MCCB

- ALL THE CABLES UP TO 350MM SHALL BE CU AL. XLPE AND ABOVE 1650 MM SHALL BE AL. AL. XLPE CABLES.

REVISION

MEP CONSULTANTS

C TO C Services Consultants Pvt. Ltd.
F-67, - (Basement) Green Park Main,
New Delhi-110016 (INDIA)
Tel.: 41618888, 41618886
E-mail: ctoinfo@ctocconsultants.com

STAGE

ELECTRICAL LOAD SANCTION

PROJECT

PROPOSED COMMERCIAL COMPLEX
AT GOLF COURSE ROAD, SECTOR 53,
GURGAON BY M/S MONIKA
INFRASTRUCTURE PVT. LTD.

DRAWING TITLE

ELECTRICAL SINGLE
LINE DIAGRAM LAYOUT

ARCHITECTS

DESIGN FORUM
OF ARCHITECTS
C-10, SECTOR-3, NOIDA
TEL: 0120-4601000, FAX: 0120-460101
E-MAIL: dfaconsultants@gmail.com

Scale	NTS & A1	NORTH
Date	01-03-2018	
Drawn		
Checked		
DRG. NO.	TAP/B/EL- SCH-01	REV. NO.