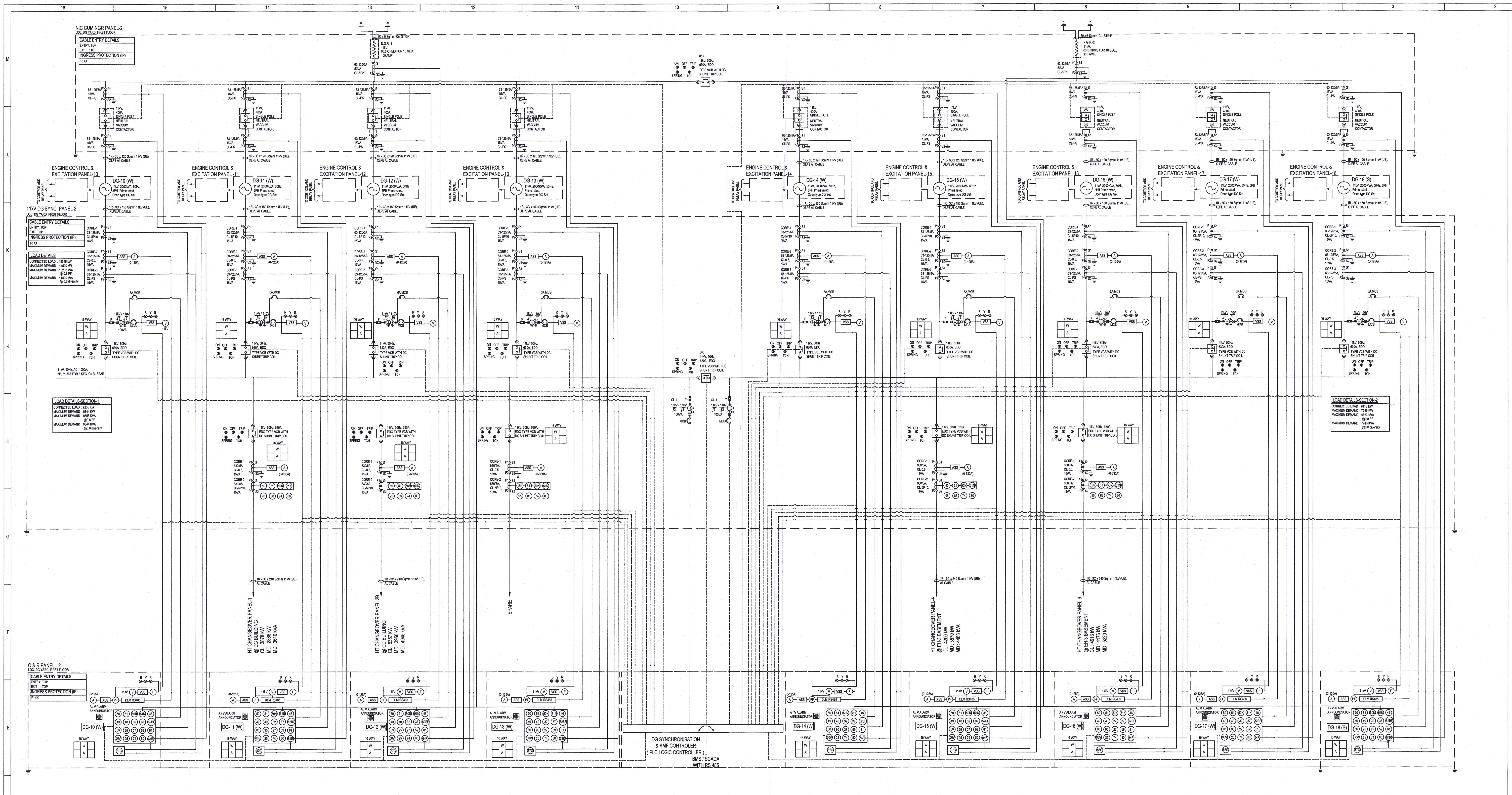
NIC CUM NGR PANEL-2
LOC: DG YARD, FIRST FLOOR
CABLE ENTRY DETAILS
ENTRY: TOP
EXIT : TOP
INGRESS PROTECTION (IP)
IP: 4X
11KV DG SYNC. PANEL-2
LOC: DG YARD, FIRST FLOOR
LOAD DETAILS
CONNECTED LOAD : 18348 kW
MAXIMUM DEMAND : 14590 kW
MAXIMUM DEMAND : 18238 kVA @ 0.8 PF
MAXIMUM DEMAND : 14590 kVA @ 0.8 diversity
11kV, 50Hz, AC, 1000A, 3P, 31.5kA FOR 3 SEC, Cu BUSBAR
LOAD DETAILS-SECTION-1
CONNECTED LOAD : 9235 KW
MAXIMUM DEMAND : 6844 KW
MAXIMUM DEMAND : 8555 KVA @0.8 PF
MAXIMUM DEMAND : 6844 KVA @0.8 diversity
LOAD DETAILS-SECTION-2
CONNECTED LOAD : 9113 KW
MAXIMUM DEMAND : 7746 KW
MAXIMUM DEMAND : 9683 KVA @0.8 PF
MAXIMUM DEMAND : 7746 KVA @0.8 diversity
N.G.R.-1 11kV, 60.5 OHMS FOR 10 SEC, 105 AMP.
N.G.R.-2 11kV, 60.5 OHMS FOR 10 SEC, 105 AMP.
50 x 6 Sqmm Cu STRIP
63-125/5A 50VA CL-5P20
11kV, 400A, SINGLE POLE NEUTRAL VACCUM CONTACTOR
ENGINE CONTROL & EXCITATION PANEL-10
ENGINE CONTROL & EXCITATION PANEL-11
ENGINE CONTROL & EXCITATION PANEL-12
ENGINE CONTROL & EXCITATION PANEL-13
ENGINE CONTROL & EXCITATION PANEL-14
ENGINE CONTROL & EXCITATION PANEL-15
ENGINE CONTROL & EXCITATION PANEL-16
ENGINE CONTROL & EXCITATION PANEL-17
ENGINE CONTROL & EXCITATION PANEL-18
TO CONTROL AND RELAY PANEL
DG-10 (W)
DG-11 (W)
DG-12 (W)
DG-13 (W)
DG-14 (W)
DG-15 (W)
DG-16 (W)
DG-17 (W)
DG-18 (S)
11kV, 2000KVA, 50Hz, 3PH Prime rated, Open type DG Set
1R - 3C x 120 Sqmm 11kV (UE), XLPE Al. CABLE
1R - 3C x 150 Sqmm 11kV (UE), XLPE Al. CABLE
CORE-1 63-125/5A, CL-5P10, 15VA
CORE-2 63-125/5A, CL-0.5, 15VA
CORE-3 63-125/5A, CL-PS 15VA
(0-125A)
6A MCB
11KV / 110V
11kV, 50Hz, 630A, EDO TYPE VCB WITH DC SHUNT TRIP COIL
ON OFF TRIP SPRING TCH
16 WAY
B/C 11kV, 50Hz, 630A, EDO TYPE VCB WITH DC SHUNT TRIP COIL
CL-1 11kV / 110V 100VA
11kV, 50Hz, 630A, EDO TYPE VCB WITH DC SHUNT TRIP COIL
CORE-1 630/5A, CL-0.5, 15VA
CORE-2 630/5A, CL-5P10, 15VA
(0-630A)
1R - 3C x 240 Sqmm 11kV (UE), Al. CABLE
HT CHANGEOVER PANEL-1 @ DG BUILDING CL : 3878 KW MD : 2888 KW MD : 3610 KVA
HT CHANGEOVER PANEL-2B @ CC BUILDING CL : 5357 KW MD : 3956 KW MD : 4945 KVA
SPARE
HT CHANGEOVER PANEL-4 @ EH-3 BASEMENT CL : 4200 KW MD : 3570 KW MD : 4463 KVA
HT CHANGEOVER PANEL-6 @ EH-3 BASEMENT CL : 4913 KW MD : 4176 KW MD : 5220 KVA
C & R PANEL - 2
LOC: DG YARD, FIRST FLOOR
A / V ALARM ANNUNCIATOR
DLM RS485
DG SYNCHRONISATION & AMF CONTROLLER (PLC LOGIC CONTROLLER)
BMS / SCADA WITH RS 485

SLD SYMBOLS

S.NO	SYMBOL	DESCRIPTION
1	(25)	CHECK SYNCHRONISE RELAY
2	(27)	UNDER VOLTAGE RELAY
3	(32)	DIRECTIONAL POWER RELAY
4	(37)	UNDER POWER RELAY (REVERSE POWER RELAY)
5	(40)	FIELD FAILURE RELAY
6	(46)	NEGATIVE PHASE SEQUENCE RELAY
7	(49)	MACHINE THERMAL RELAY
8	(50)	INSTANTANEOUS OVER CURRENT RELAY
9	(50N)	INSTANTANEOUS EARTH FAULT RELAY
10	(51)	IDMT OVER CURRENT RELAY
11	(51N)	IDMT EARTH FAULT RELAY
12	(52BF)	BREAKER FAILURE PROTECTION
13	(59)	OVER VOLTAGE RELAY
14	(60V)	VOLTAGE BALANCE RELAY
15	(64R)	RESTRICTED EARTH FAULT RELAY
16	(74)	ALARM RELAY
17	(80)	DC HEALTHY RELAY

SLD SYMBOLS

S.NO	SYMBOL	DESCRIPTION
18	(81)	FREQUENCY RELAY
19	(86)	LOCK-OUT RELAY
20	(87G)	GENERATOR DIFFERENTIAL RELAY
21	(95)	TRIP CIRCUIT SUPERVISION RELAY
22	■	A / V ALARM ANNOUNCIATOR
23	┌┴┐	STAR POINT
24		MINIATURE CIRCUIT BREAKER
25	P1 S1 P2 S2	CURRENT TRANSFORMER
26		DRAWOUT POTENTIAL TRANSFORMER
27	●	INDICATION LAMP (OFF/TRIP/SPRING/TCH)
28	VSS	VOLTMETER SELECTOR SWITCH
29	ASS	AMMETER SELECTOR SWITCH
30	(V)	DIGITAL VOLTMETER
31	(A)	DIGITAL AMMETER
32		VACUUM CIRCUIT BREAKER
33	⏚	GROUNDING
34	DLM RS485	DIGITAL LOAD MANAGER WITH RS485 PORT
35	16 WAY W A	16 WAY WINDOW ANNUNCIATOR

GENERAL DG OPERATING NOTES

1. NORMALLY BUS COUPLER IS OPEN AND ALL DG'S ARE IN CLOSED CONDITION, WHEN GRID POWER IS AVAILABLE.
2. IN THE EVENT OF GRID SUPPLY FAILURE, THE DG SETS WILL BE SEQUENTIALLY STARTED TO CATER THE DEMAND LOAD.
3. LOAD BALANCING ON THE TWO BUS SECTION OF 11kV DG SYNC. PANEL WILL BE MANUALLY DECIDED & SUPERVISED DEPENDING ON LOAD CONDITION (WITH BMS ASSISTANCE).
4. CLOSING OF THE NEUTRAL VACUUM CONTACTOR SHALL BE DONE AUTOMATICALLY BASED ON FOLLOWING LOGICAL CONDITION.
   * WHEN DG IS IN ISLAND MODE
   * WHEN DG IS THE FIRST TO BE PUT INTO SERVICE CONSIDERING TWO OR MORE DG SETS INTENDED FOR PARALLEL OPERATION
5. DG SETS SHALL BE CAPABLE OF CONTINUES PARALLEL OPERATION.
6. A COMMON AUDIO / VISUAL ALARM ANNUNCIATOR WITH HOOTER SHALL BE PROVIDED IN THE CONTROL & RELAY PANEL.
6. 110V AUXILIARY DC SUPPLY SHALL BE PROVIDED.
7. THE DETAILED DG SEQUENCE OF OPERATION (OPERATING PHILOSOPHY) SHALL BE DETERMINED & FINALIZED BY DG VENDOR DURING DETAIL ENGINEERING.
8. VENDOR HAS TO DEVELOP PROPER LOGIC FOR NGR OPERATION.
9. THERE WILL BE A COMPLETE NETWORK OF DIGITAL / ANALOGUE SIGNALS BETWEEN DG BREAKER PANEL, NGR PANEL, DG CONTROL AND RELAY PANEL FOR SYNCHRONIZATION.
10. THE DETAILS AND THE INTERFACING OF THE DG MOUNTED CONTROL PANEL SHALL BE SUBMITTED DURING DETAIL ENGINEERING STAGE UPON THE FINALIZED DG VENDOR.
11. CONTROL CABLES FROM ENGINE TO C&R PANEL, HT PANEL WILL BE AS PER OEM RECOMMENDATION.
12. DC AUXILIARY POWER SUPPLY FROM THE BATTERY CHARGER WILL BE PROVIDED IN THE PANEL CONTROL WIRING DIAGRAM

NOTES

1. EARTHING SHALL BE CARRIED OUT AS PER IS. 3043-1987.
2. NEUTRAL EARTHING SHALL BE OF ADEQUATE SIZE OF Cu. FLAT/ STRIP AND BODY EARTHING SHALL BE OF ADEQUATE SIZE OF GI. FLAT/ STRIP.
3. NO OTHER SERVICE PIPE LINE WATER MAINS TELEPHONE LINES, INTERCOM LINES, GAS PIPES OR ANY OTHER SERVICES LINES SHALL BE LAID IN THE ELECTRICAL CONDUITS.
4. FOLLOWING CLEARANCE SHALL BE MAINTAINED DURING THE ERECTION OF PANELS
   A) FRONT CLEARANCE OF THE PANEL SHALL BE MINIMUM 1000mm
   B) IF TWO SWITCH BOARDS ARE ERRECTED FACING EACH OTHER THE CLEARANCE BETWEEN THEM SHOULD NOT BE LESS THAN 2000mm
   C) IF TWO SWITCH BOARDS ARE ERECTED BACK TO BACK, THE CLEARANCE OF NOT LESS THAN 1500mm SHOULD BE MAINTAINED BETWEEN THEM.
   D) IF TWO SWITCH BOARDS ARE ERECTED ADJACENT TO EACH OTHER IN THE SAME LINE, THE CLEARANCE BETWEEN THE TWO SWITCH BOARDS SHOULD BE EITHER LESS THEN 200mm MORE THAN 750mm.
   E) REAR CLEARANCE SHALL BE MINIMUM 750mm IF THERE ARE REAR ENTRY OF CABLES OR REAR DOORS OR THEIR IS NECESSITY TO WORK BEHIND.
   F) REAR CLEARANCE SHALL BE LESS THAN 200mm IF THERE IS NO SUCH ITEM AND NECESSITY DESCRIBED ABOVE.
   G) H.V OR M.V CIRCUIT BREAKER, IF ERECTED INDEPENDENTLY MAY HAVE TO BE ERECTED WITH A CLEARANCE OF NOT LESS THAN 1000mm ON THE FRONT SIDE AND CLEARANCE OF NOT LESS THAN 750mm ON OTHER SIDES.
   H) SPACING BETWEEN HT GEARS / SWITCH BOARDS AND M.V SWITCH BOARDS LOCATED IN THE SAME ENCLOSURE / ROOM SHOULD BE ATLEAST TWO METERS.
   I) IF DOUBLE FRONTED SWITCH BOARDS / MCC PANELS ARE ERECTED A SPACE OF NOT LESS THEN 1000mm SHOULD BE PROVIDED FOR BOTH THE FRONT SIDES.
   J) SIDE CLEARANCE : IF THE REAR CLEARANCE IS 750mm AND ABOVE SIDE SPACINGS OF ATLEAST 750mm SHOULD ALSO BE PROVIDED ON BOTH SIDES OF THE BOARD.
   K) WHERE THE REAR CLEARANCE IS 750mm OR MORE, A PASSAGE WAY CLEAR TO THE HEIGHT OF 1800mm SHOULD ALSO BE PROVIDED.
4. ALL CABLES ARE ARMOURED ALUMINIUM CONDUCTOR CABLES UNLESS OTHERWISE SPECIFIED.
5. ALL THE FEEDERS SHALL BE LABELLED WITH PROPER FEEDER IDENTIFICATION.
7. INDOOR PANELS SHALL BE OF IP - 4X CATEGORY.
8. FOR EARTH FLAT SIZES PLEASE REFER RESPECTIVE EARTHING SCHEMATIC.

ANNUNCIATION

S.NO	TYPE OF ANNUNCIATION
1.	INSTANTANEOUS OVER CURRENT RELAY ACTIVATED
2.	INSTANTANEOUS EARTH FAULT RELAY ACTIVATED
3.	IDMT OVER CURRENT RELAY ACTIVATED
4.	IDMT EARTH FAULT RELAY ACTIVATED
5.	DISTANCE PROTECTION RELAY ACTIVATED
6.	UNDER VOLTAGE RELAY ACTIVATED
7.	OVER VOLTAGE RELAY ACTIVATED
8.	TRIP CIRCUIT SUPERVISION RELAY ACTIVATED
9.	MASTER TRIP RELAY(ELECTRICAL FAULT) ACTIVATED
10.	MASTER TRIP RELAY(MECHANICAL FAULT) ACTIVATED
11.	DC HEALTHY RELAY ACTIVATED
12.	AUTOMATIC RECLOSER ACTIVATED

ALL CURRENT OPERATING RELAY IN THE HT PANEL SHALL BE OF NUMERICAL TYPE RELAY WITH RS485 PORT.

NUMERICAL RELAYS WITH RS 485 COMMUNICATION PORT

1. NON DIRECTIONAL COMBINED INSTANTANEOUS & IDMT O/C AND EARTH FAULT REALY WITH 2 O/C & E/F RELAY WITH HIGH SET AND 2 NOS. HAND RESET CONTACT 'PER UNIT PER POLE.
2. RESTRICTED EARTH FAULT RELAY
3. MASTER TRIP RELAY (LOCKOUT RELAY)
4. ANTIPUMPING RELAY
5. TRIP CIRCUIT SUPERVISION RELAY
6. DC HEALTHY RELAY
7. AUXILLARY RELAY
8. UNDER VOLTAGE AND OVER VOLTAGE RELAY
9. ALARM RELAY

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Certification

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Design Consultant		
Architectural Consultant		
Proof Consultant		
Structural	**MEP**	**ICT**
PEAC		

Reviewed GFC drawing prepared by Contractor and ensured that all preliminary aspects and parameters have been adhered to.

Signed on behalf of PEAC

Date: 07/08/2019

LIMITED

Issued by:
Employer / Employer's Engineer

REV	DESCRIPTION	DATE	DSGN	DRWN	CHKD	APPD
R0	ISSUED FOR CONSTRUCTION	05.08.19	SBTS	TVS / TSS	MK	RAA

Revisions

ARCHITECTURE			FPS		
STRUCTURAL			PIPING		
ELECTRICAL			PHE		
ELV SYSTEM			GIS		
HVAC			GEOTECH.		
CHECKED BY	SIGN	DATE	CHECKED BY	SIGN	DATE

EPC Contractor
L&T Construction
Buildings & Factories

JOB No : O17203

Project Name
DESIGN AND CONSTRUCTION OF INDIA INTERNATIONAL CONVENTION & EXPO CENTRE
SECTOR 25, DWARKA, NEW DELHI, INDIA

Drawing Status
GOOD FOR CONSTRUCTION (GFC)

GOOD FOR CONSTRUCTION

Drawing No			Rev. No
E	00	0064	R0

Title :
BUILDING NAME
HT DG MSLD 2/2

EDRC DWG No :	Scale :	Sheet Size
O17203 - E - SP - 00 - 1L - 0064	As Indicated	A0

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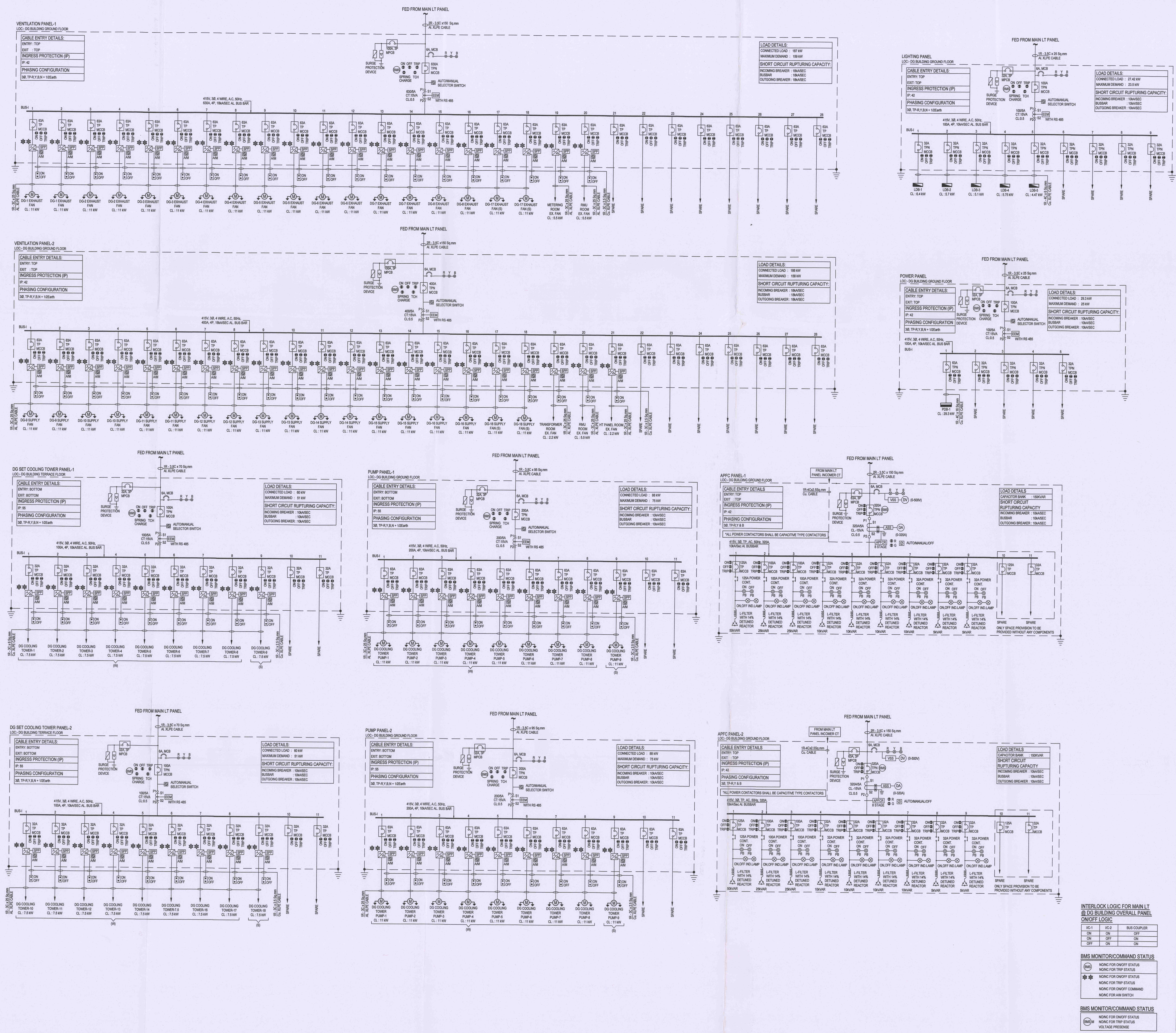
VENTILATION PANEL-1
LOC:- DG BUILDING GROUND FLOOR
CABLE ENTRY DETAILS: ENTRY : TOP / EXIT : TOP
INGRESS PROTECTION (IP) IP: 42
PHASING CONFIGURATION 3Ø, TP-R,Y,B,N + 1/2Earth
FED FROM MAIN LT PANEL
2R - 3.5C x150 Sq.mm Al. XLPE CABLE
630A TPN MCCB
630/5A CT:15VA CL:0.5
415V, 3Ø, 4 WIRE, A.C, 50Hz, 630A, 4P, 18kA/SEC AL. BUS BAR
LOAD DETAILS: CONNECTED LOAD : 187 kW / MAXIMUM DEMAND : 159 kW
SHORT CIRCUIT RUPTURING CAPACITY: INCOMING BREAKER : 18kA/SEC / BUSBAR : 18kA/SEC / OUTGOING BREAKER : 18kA/SEC
DG-1 EXHAUST FAN CL : 11 kW … DG-17 EXHAUST FAN (S) CL : 11 kW
METERING ROOM EX. FAN CL : 5.5 kW
RMU ROOM EX. FAN CL : 5.5 kW
SPARE
VENTILATION PANEL-2
LOC:- DG BUILDING GROUND FLOOR
400A TPN MCCB
400/5A CT:15VA CL:0.5
415V, 3Ø, 4 WIRE, A.C, 50Hz, 400A, 4P, 18kA/SEC AL. BUS BAR
LOAD DETAILS: CONNECTED LOAD : 188 kW / MAXIMUM DEMAND : 158 kW
DG-9 SUPPLY FAN CL : 11 kW … DG-18 SUPPLY FAN (S) CL : 11 kW
TRANSFORMER ROOM EX. FAN CL : 2.2 kW
RMU ROOM EX. FAN CL : 5.5 kW
HT PANEL ROOM EX. FAN CL : 2.2 kW
LIGHTING PANEL
LOC:- DG BUILDING GROUND FLOOR
1R - 3.5C x 25 Sq.mm Al. XLPE CABLE
100A TPN MCCB
415V, 3Ø, 4 WIRE, A.C, 50Hz, 100A, 4P, 10kA/SEC AL. BUS BAR
LOAD DETAILS: CONNECTED LOAD : 27.42 kW / MAXIMUM DEMAND : 23.5 kW
SHORT CIRCUIT RUPTURING CAPACITY: INCOMING BREAKER : 10kA/SEC / BUSBAR : 10kA/SEC / OUTGOING BREAKER : 10kA/SEC
LDB-1 CL : 6.4 kW
LDB-2 CL : 5.7 kW
LDB-3 CL : 5.1 kW
LDB-4 CL : 5.75 kW
LDB-5 CL : 4.47 kW
1R - 4C x 6 Sq.mm Cu. XLPE CABLE
POWER PANEL
LOC:- DG BUILDING GROUND FLOOR
LOAD DETAILS: CONNECTED LOAD : 29.3 kW / MAXIMUM DEMAND : 25 kW
PDB-1 CL : 29.3 kW
1R - 4C x 16 Sq.mm Cu. XLPE CABLE
DG SET COOLING TOWER PANEL-1
LOC:- DG BUILDING TERRACE FLOOR
CABLE ENTRY DETAILS: ENTRY : BOTTOM / EXIT : BOTTOM
IP: 55
1R - 3.5C x 70 Sq.mm Al. XLPE CABLE
100A TPN MCCB
415V, 3Ø, 4 WIRE, A.C, 50Hz, 100A, 4P, 10kA/SEC AL. BUS BAR
LOAD DETAILS: CONNECTED LOAD : 60 kW / MAXIMUM DEMAND : 51 kW
DG COOLING TOWER-1 … TOWER-9 CL : 7.5 kW
PUMP PANEL-1
LOC:- DG BUILDING GROUND FLOOR
1R - 3.5C x 95 Sq.mm Al. XLPE CABLE
200A TPN MCCB
415V, 3Ø, 4 WIRE, A.C, 50Hz, 200A, 4P, 10kA/SEC AL. BUS BAR
LOAD DETAILS: CONNECTED LOAD : 88 kW / MAXIMUM DEMAND : 75 kW
DG COOLING TOWER PUMP-1 … PUMP-9 CL : 11 kW
APFC PANEL-1
LOC:- DG BUILDING GROUND FLOOR
CABLE ENTRY DETAILS: ENTRY : TOP / EXIT : TOP
PHASING CONFIGURATION 3Ø, TP-R,Y & B
*ALL POWER CONTACTORS SHALL BE CAPACITIVE TYPE CONTACTORS
2R - 3.5C x 150 Sq.mm Al. XLPE CABLE
320A TPN MCCB
FROM MAIN LT PANEL INCOMER CT
APFCR 8 STAGE
415V, 3Ø, TP, AC, 50Hz, 320A, 10kA/Sec AL BUSBAR
LOAD DETAILS: CAPACITOR BANK : 150KVAR
L-FILTER WITH 14% DETUNED REACTOR
50KVAR / 25KVAR / 25KVAR / 10KVAR / 10KVAR / 10KVAR / 10KVAR / 5KVAR / 5KVAR
SPARE ONLY SPACE PROVISION TO BE PROVIDED WITHOUT ANY COMPONENTS
DG SET COOLING TOWER PANEL-2
DG COOLING TOWER-10 … TOWER-18 CL : 7.5 kW
PUMP PANEL-2
APFC PANEL-2

SLD SYMBOLS

LEGEND DETAILS

S.NO	SYMBOL	DESCRIPTION
1		MINIATURE CIRCUIT BREAKER
2		MOULDED CASE CIRCUIT BREAKER
3		AIR CIRCUIT BREAKER - EDO
4		CURRENT TRANSFORMER
5	⊗/⊗	INDICATION LAMP
6	VSS	VOLTMETER SELECTOR SWITCH
7	ASS	AMMETER SELECTOR SWITCH
8	EEM	ENERGY METER WITH RS 485
9	MFM	MULTIFUNCTION METER
10	○	VOLTMETER
11	○	AMMETER
12		LIGHTING DISTRIBUTION BOARD (LDB)
13		EMERGENCY LIGHTING DISTRIBUTION BOARD (ELDB)
14		POWER DISTRIBUTION BOARD (PDB)
15		UPS POWER DISTRIBUTION BOARD (UDB)
16		GROUNDING
17	E/L	ELECTRICAL INTERLOCK
18		UN-INTERRUPTED POWER SUPPLY
19	APFCR	AUTOMATIC POWER FACTOR CORRECTION RELAY
20	▨	AUTO/MANUAL SELECTOR SWITCH
21	BMS	BUILDING MANAGEMENT SYSTEM
22	64R	RESTRICTED EARTH FAULT RELAY
23	VFD	VARIABLE FREQUENCY DRIVE
24	ON OFF	EMERGENCY ON/OFF PUSH BUTTON
25	SPP	SINGLE PHASE PROTECTION RELAY
26	M	MOTOR / PUMP
27		POWER CONTACTOR
28		SURGE PROTECTION DEVICE

NOTE

SHORT CIRCUIT BREAKING CAPACITY OF ALL ACB's SHALL BE OF Icw=Icu=Ics

NOTES

1. MAIN PCC PANEL SHOULD FULFILL THE REQUIREMENTS OF CEIG/RELEVANT SPECIFICATIONS.
2. CONTROL CIRCUIT VOLTAGE SHALL BE 240V AC UNLESS SPECIFIED.
3. ALL EQUIPMENTS & PANELS ARE DOUBLE EARTHED WITH ADEQUATE SIZE OF G.I. STRIPS (BODY EARTHING)
4. ALL CABLES ARE ARMOURED CABLES UNLESS OTHERWISE SPECIFIED.
5. ALL THE FEEDERS SHALL BE LABELLED WITH FEEDER IDENTIFICATION.
6. THIS SLD SHOULD BE READ IN CONJUNCTION WITH RELEVANT TECHNICAL SPECIFICATION, RESPECTIVE FLOOR LAYOUTS & EARTHING LAYOUT.
7. ALL BUSDUCT/RISING MAINS SHALL BE OF SANDWICH CONSTRUCTION IT SHALL BE POSSIBLE TO MOUNT THE BUSBAR SYSTEM IN ANY ORIENTATION WITHOUT AFFECTING THE CURRENT RATING.
8. EARTHING SHALL BE CARRIED OUT AS PER IS 3043 / 1987.
9. COMMON APFC CT AND CONTROLLER SHALL BE PROVIDED TO CONTROL / SENSING FOR BOTH THE CAPACITOR BANK UNDER EACH BUS SECTION ONLY IN MAIN LT PANEL.
10. ALL CABLES ARE MULTICORE XLPE AL/CU ARMOURED CABLE UNLESS OTHERWISE SPECIFIED
11. THESE DETAILS ARE SUBJECT TO CHANGE DURING DETAIL ENGINEERING BASED ON VENDOR DETAILS
12. CIRCUIT BREAKER FOR MOTOR FEEDER IS DESIGNED BASED ON TYPE 2 COORDINATION CHART. THE FINAL RATING SHALL BE DECIDED BASED ON SELECTED VENDOR COORDINATION CHART
13. STAR DELTA STARTER IS PROVIDED FOR 7.5KW MOTOR RATING AND ABOVE. LESS THAN 7.5KW MOTOR RATING IS PROVIDED WITH DOL STARTER
14. 2RUNS OF CABLE TO BE PROVIDED FROM S/D STARTER TO PUMP AND SINGLE RUN TO BE PROVIDED FOR DOL STARTER TO PUMP
15. FOR MOTOR AND PUMP PANELS, TP BREAKER & BUSBARS SHALL BE PROVIDED. FOR CONTROL SUPPLY AND INDICATION LAMPS, CONTROL TRANSFORMER SHALL BE PROVIDED IN THE PANEL

INTERLOCK LOGIC FOR MAIN LT @ DG BUILDING OVERALL PANEL ON/OFF LOGIC

I/C-1	I/C-2	BUS COUPLER
ON	ON	OFF
ON	OFF	ON
OFF	ON	ON

BMS MONITOR/COMMAND STATUS

BMS	NO/NC FOR ON/OFF STATUS NO/NC FOR TRIP STATUS
✱✱	NO/NC FOR ON/OFF STATUS NO/NC FOR TRIP STATUS NO/NC FOR ON/OFF COMMAND NO/NC FOR A/M SWITCH

BMS MONITOR/COMMAND STATUS

BMS M	NO/NC FOR ON/OFF STATUS NO/NC FOR TRIP STATUS VOLTAGE PRESENSE

REFERENCE DRAWINGS / DOCUMENTS : (LATEST REVISION)

DRAWING NAME	DRAWING NUMBER
ELECTRICAL	
O17203-E-SP-30-1L-0003	DG YARD LT MASTER SINGLE LINE DIAGRAM (SHEET 1 OF 2)

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Certification

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Structural	MEP	ICT
PEAC	Reviewed GFC drawing prepared by Contractor and ensured that all preliminary aspects and parameters have been adhered to.
Issued by: Signed on behalf of PEAC	Date: 26/02/2019
Employer / Employer's Engineer	

R0	RELEASED AS GOOD FOR CONSTRUCTION	21.02.19	THK	GANA	MK	RAA
REV	DESCRIPTION	DATE	DSGN	DRWN	CHKD	APPD

Revisions

ARCHITECTURE			FPS		
STRUCTURAL			PIPING		
ELECTRICAL			PHE		
ELV SYSTEM			GIS		
HVAC			GEOTECH.		
CHECKED BY	SIGN	DATE	CHECKED BY	SIGN	DATE

EPC Contractor
L&T Construction
Buildings & Factories
JOB No : O17203

Project Name
DESIGN AND CONSTRUCTION OF INDIA INTERNATIONAL CONVENTION & EXPO CENTRE
SECTOR 25, DWARKA, NEW DELHI, INDIA

Drawing Status
GOOD FOR CONSTRUCTION
GOOD FOR CONSTRUCTION (GFC)

Drawing No			Rev. No
E	30	0003	R0

Title :
DG YARD LT
MASTER SINGLE LINE DIAGRAM
(SHEET 2 OF 2)

EDRC DWG No :	Scale :	Sheet Size
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