

ENGINEERING DEPARTMENT

STANDARD OPERATING PROCEDURE		
Department: Engineering	SOP No.:	
Title: SOP for Operation of Main LT and PCC Panel	Effective Date:	
Supersedes: Nil	Review Date:	
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1.0 OBJECTIVE

To lay down procedure for the operation of Main LT/PCC Panel

2.0 SCOPE

This SOP is applicable for Operation of Main LT/PCC Panel.

3.0 RESPONSIBILITY.

Engineering Supervisor/technician will operate the Main LT/PCC Panel.

4.0 PROCEDURE

4.1 STARTING OF MAIN LT/PCC PANEL MANUAL

- 4.1.1 Ensure HPSEB 3Ph Supply (410-420 VAC) available on LT Panel no 03 Feeder 16F1 R,Y,B Indicators Red , Yellow & Green on LT Panel no 03 Feeder 16F1
- 4.1.2 Ensure ACB OFF Indicator glow Green. on LT Panel no 03 Feeder 16F1
- 4.1.3 Select PLC Selector Switch 1S1 and 3S1 to 'OFF' position.
- 4.1.4 Select Selector Switch 1S2, 2S1,3S2 & 4S1 in Manual position.
- 4.1.5 Rotate Rotary Switch of Main ACB to CLOSE position from LT Panel no 03 Feeder 16F1
- 4.1.6 Ensure Main ACB ON Indicator glow Red.
- 4.1.7 Rotate Rotary Switch of Bus Coupler ACB to CLOSE position from LT Panel no 03 Feeder 8F1
- 4.1.8 Ensure Bus Coupler ACB ON Indicator glow Red on LT Panel no 03 Feeder 8F1.
- 4.1.9 Switch ON Incomer (I/C) MCCB for Capacitor-1 from LT Panel no 03 Feeder. 13F4
- 4.1.10 Switch ON Incomer (I/C) MCCB for Capacitor-2 from LT Panel no 03 Feeder 3F4
- 4.1.11 Switch ON Chiller MCCB from LT Panel no 03 Feeder 11F1
- 4.1.12 Switch ON Utility MCCB from LT Panel no 03 Feeder 12F3
- 4.1.13 Switch ON External lighting Panel MCCB from LT Panel no 03 Feeder 11F3
- 4.1.14 Ensure 3Ph Supply (410-420 VAC) available and R,Y,B, ACB OFF Indicator glow of PDP no 04 Feeder A-1.
- 4.1.15 witch ON Production Equipment Panel MCCB from PDP no 04 Feeder B-1
- 4.1.16 Switch ON AHU Classified MCCB from PDP no 04 Feeder B-3
- 4.1.17 Switch ON AHU Non Classified MCCB from PDP no 04 Feeder C-2
- 4.1.18 Switch ON General Power Panel MCCB from PDP no 04 Feeder B-2
- 4.1.19 Switch ON Internal Lighting Panel MCCB from PDP no 04 Feeder C-3

4.2 STOPPING OF MAIN LT/PCC PANEL

- 4.2.1 Switch OFF Internal Lighting Panel MCCB from PDP no 04 Feeder C-3
- 4.2.2 Switch OFF General Power Panel MCCB from PDP no 04 Feeder B-2
- 4.2.3 Switch OFF AHU Classified MCCB from PDP no 04 Feeder B-3



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- 4.2.4 Switch OFF AHU Non Classified MCCB from PDP no 04 Feeder C-2
- 4.2.5 Switch OFF Production Equipment Panel MCCB from PDP no 04 Feeder B-1
- 4.2.6 Push CLOSE PB(O)of PDP no 04 Feeder A-2 ACB
- 4.2.7 Rotate Rotary Switch of Bus Coupler ACB to TRIP position
- 4.2.8 Switch OFF I/C MCCB for Capacitor-2 from Main LT Panel no 03 Feeder 3F4
- 4.2.9 Switch OFF I/C MCCB for Capacitor-1 from Main LT Panel no 03 Feeder 13F4
- 4.2.10 Switch OFF Chiller Feeder MCCB from Main LT Panel no 03 Feeder 11F1
- 4.2.11 Switch OFF Utility Feeder MCCB from Main LT Panel no 03 Feeder 13F4
- 4.2.12 Switch OFF External lighting Panel MCCB from Main LT Panel no 03 Feeder 11F3
- 4.2.13 Rotate Rotary Switch of Main ACB to TRIP position
- 4.2.14 Changeover the Supply on HPSEB Ref. SOP.

5.0 SAFETY AND PRECAUTIONS:

- 5.1 Always check capacitor bank operational during HPSEB Supply
- 5.2 AII Panels Front and Rear side cover rubber Mat

6.0 REVISION HISTORY

Revision No.	Reason for Revision	Superseded from & date
00	New	

7.0 **REFERENCES**

Panel Drawing

8.0 ABBREVIATIONS

SOP Standard Operating Procedure

ACB Air Circuit Breaker

PDP Power Distribution Panel

CT Cooling Tower

CWP Cooling Water Pump
ChWP Chilled Water Pump

F Feeder in LT Panel

A to E Feeder in other Panels

ECP Electronic Control Panel

A/M Auto/Manual



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9.0 ANNEXURE

Annexure I: ACB, Selector Switch MCCB Details

Annexure II: Panel Details

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Annexure I ACB, Selector Switch MCCB Details

S.NO	DETAILS	DESCRIPTION	PANEL NO	FEEDER NO
01	1S1	PLC ON/OFF Selector switch	03	7F1
02	1S2	DG -1 ACB A/M Selector Switch	03	7F1
03	1S3	DG-1 stop A/M Selector Switch	03	7F1
04	2S1	Bus Coupler ACB A/M Selector	03	8F1
		Switch		
05	2S1	Bus Coupler ACB A/M Selector	03	8F1
		Switch		
06	3S1	PLC ON/OFF Selector switch	03	9F1
07	3S2	DG-2 ACB A/M Selector Switch	03	9F1
08	3S3	DG-2 stop A/M Selector Switch	03	9F1
09	4S1	Main ACB Selector switch	03	16F1
10	4S2	A/M Changeover Selector switch	03	16F1
11	ACB-1	DG-1 ACB	03	7F2
12	ACB-2	Bus Coupler ACB	03	8F2
13	ACB-3	DG-2 ACB	03	9F2
14	ACB-4	Main ACB (HPSEB)	03	16F2
15	ACB-5	Power Distribution Panel ACB	03	6F2
16	ACB-6	MCC Room PDP ACB	04	A-2



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Annexure II Panel Details

PANEL NO	DESCRIPTION	AREA	LOCATION
01	Vacuum Circuit Breaker Panel	Utility	VCB Room
02	Remote Tap Changer Panel	Utility	Sub Station
03	LT/PCC Panel	Utility	Sub Station
04	Power Distribution Panel	Service Floor	MCC Room
05	Production Equipment Panel	Service Floor	MCC Room
06	AHU Classified Panel	Service Floor	MCC Room
07	AHU Non Classified Panel	Service Floor	MCC Room
08	General Power Panel	Service Floor	MCC Room
09	Internal Lighting Panel	Service Floor	MCC Room
10	External Lighting Panel	Utility	Sub Station
11	Utility / Chiller Panel	Utility	Utility Room
12	Sub Utility Panel	Utility	Utility Room
13	Street Light Panel	Utility	Utility Room
14	Electronic Control Panel	Utility	DG
15	ChWP Drive Panel	Utility	Utility Room
16	CWP for Chiller Drive Panel	Utility	Utility Room
17	CWP for DG Drive Panel	Utility	Sub Station
18	CWP for Process Drive Panel	Utility	Utility