



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
DALMIAPURAM**



Issue No. 02	Rev. No: 01	Effective Date: 22.05.2015	SOP/Elect /02
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Issued By: S & P	Approved By: Elect. & Inst Head
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SOP for HT Panel Maintenance

Scope/Purpose : This Procedure to establish and maintenance of HT Panels

Responsibility : Section Engineer – Electrical

Accountability : Head-Electrical

PPE:

1. Safety helmet,
2. Safety shoe,
3. Rubber Gloves.

Tools:

1. Tester
2. Megger

Hazard Analysis:

Risks associated

Electric Shock

Mitigating Measures

Use of proper tool, Rubber Gloves

Training needs:

1. Usage of tools and Nature of Hazards

Procedure:

DOs:

1. Switch off incoming supply to the panel from HYDEL, DG and also from Feedback supply arrangement.
2. Display Men Working Caution Board.
3. Discharge the bus bars and also permanently earth all the three bus bars till all the jobs are completed.
4. The earth rods shall be put at visible place, so that it is easily known to all.
5. After the maintenance jobs are completed, remove the earth rods.
6. Ensure that all doors and covers are closed in the panel.



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7. Before energising the bus bar, check all the outgoing feeders are in OFF condition.
8. After ALL The jobs are completed, remove the display caution board and give clearance for switching ON.
9. Ensure physical isolation of all the three phases after switching OFF the Isolator at DBB panel wherever possible.
10. Ensure the availability of the Mechanical Interlock key and fix the key properly before closing isolator.
11. Stand always above the RUBBER MAT while doing any switching operation.
12. Ensure bus shutters are closed after breaker is lowered / withdrawn.
13. Check the breaker tripping by relay operation.
14. First switch OFF the secondary side of the TR breaker and then switch OFF the primary side of the TR breaker.
15. Disconnect control cable plug and socket before withdrawing the breaker.
16. Ensure all mechanical and electrical interlocking systems are intact.

DON'Ts:

1. Don't switch OFF the Isolator when Vacuum contactor / SF6 breaker is ON.
2. Don't attempt to close both TNEB and DG isolators of the same outgoing feeder.
3. Don't stand very close and in front of the panel while taking trials.
4. Don't open the Isolator chamber or Bus bar chamber while bus bar is energised.
5. Don't work in the capacitor feeders without discharging the capacitors.
6. Don't charge the bus bar, if the insulation valve is low.
7. Don't work in the breaker while spring is in charged condition.
8. Don't insert / withdraw the breaker while it is in closed condition.
9. Don't insert any breaker while its spring is in charged condition.
10. Don't bypass / tamper any mechanical castle interlocking arrangement.
11. Don't smoke in the electrical panel rooms.

Emergency / Emergency Shut OFF:



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1. If any injury is there, first aid will be given and inform to the safety department or call Emergency number 523 / /9865177444/9865195111.

Records/Annexure:

1. Register for Maintenance of HT Panels
2. JSA is enclosed below.

JOB SAFETY ANALYSIS:(JSA)

Job Safety Analysis	Job: HT Panel Maintenance	Date:	Analysis by:	Reviewed by:
Title of employee doing job: Permanent/ Contract labour	Supervisor: Section Engineer	Department: Electrical	Section: Plant	Approved by:
Req'd/recommended PPE: Safety helmet, Safety shoe, & Rubber Gloves.				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Discharge the Bus bars	Electric Shock	Proper Discharging methods	Un discharged components	Use proper Tools and Discharge rod

HEAD E & I

HEAD TECHNICAL