



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
ARIYALUR
ELECTRICAL DEPARTMENT**



Issue No. 01	Rev. No: 01	Effective Date: 07.07.2017	SOP/ELEC/044
Issued By: M.R		Approved By: HOD (E&I)	
SOP FOR POWER RESUME DURING BLACKOUT			

Scope : SOP is applicable for resume the power supply within 5 to 6 minutes for
Kiln Aux. drive during black out.

Responsibility : Shift Electrical engineer

Accountability : Section Head Electrical

PPE:

1. Safety helmet,
2. Safety shoe,
3. Nose Mask.
4. Safety Gloves.
5. Torch light

Tools:

1. General Tools
2. Cycle

Hazards:

Risks associated

1. In case night hit with objects and fall

Mitigating Measures

Keep torch light during night

Training needs:

1. Work related training
2. Emergency preparedness

Procedure for resuming the power supply during black out.

1. Shift Engineer will approach to CMBH load center
2. One shift Technicians will approach to CCR load center and start the CCR DG and wait for further instruction of Shift Engineer.
3. Other Technician will approach to 110 KV switch yard by cycle and observed the availability of EB power.
4. Shift Engineer will observed 11 KV voltage on CB 8 board (to ensure the availability of EB power)
5. **If 11 KV voltages is not available on CB8**, shift Engineer will informed to CCR LC technicians for changed over the DG supply for kiln aux. And after confirming the



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- DG supply Shift engineer will give clearance to CCR operator for running the KILN aux. only and some area lighting.
6. **If 11 KV voltage available on CB 8**, Shift engineer will note down the Alarm from annunciation, protection relay (P127) mount on CB 8 and CB 6 and Master trip relay on CB8.
 7. Clear the all alarm from protection relay (P127) on CB 8 and CB6 board , reset the Master trip relay, reset the alarm of annunciation by acknowledge and reset PB on Bus coupler board and *immediately give the clearance to CPP for closing the CB 8.*
 8. After closing CB- 8, instruction to be given to CCR load center technicians for normalized the LT side power and go to the RMBH load center and normalized the LT side power and shift engineer will normalize the power at CMBH LC LT side power (LT side power normalized , means of closing the distribution Transformer incomer at PCC by pressing the neutral contactor PB and same time closing the TNC)
 9. After normalizing the power Shift Engineer will give the clearance for kiln aux. and lightings during peak time (between 5.35 PM to 10.10 PM) and Kiln section during normal time (10.10 pm to next day 5.45 PM).
 10. Follow up to CPP for resume the CPP power. After synchronizing the CPP clearance shall be given for all section from confirmation of CPP.
 11. **Continuation of point 5 (If 11 KV voltages is not available on CB8)** shift engineer contact to 110 KV Technicians for further information.
 12. 110 KV technicians will check the availability of 110 KV by observing the voltage on CRP panel.
 13. If 110 KV power available and 11 KV breakers tripped then note down the all alarms and reset the alarms by means of re-setting master trip relay, clearing the alarms of protection relay and acknowledge and reset the PB on 11 KV boards.
 14. Shift Engineer will contact 110 KV technician and based on information, give the instruction to technician to closing the 11 KV breaker. Before giving the instruction to closing the 11 KV breaker at 110 KV, shift Engineer must ensure CB - 8 breaker in open condition.



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15. After Closing the 11KV breaker at 110 KV ,shift engineer will follow the point No- 6,7,8,9 and 10.and the same time give the instruction to CCR technicians for changeover CCR power from DG to EB.
16. **If EB Power not available** Shift Engineer will contact EB (Through Mr. Sudhakar) for resuming the EB power and contact to CPP for resume the CPP Power.
17. If delay more than 20 minutes to resume the both source, Switch on RMBH DG and CMBH DG and give clearance for lighting power.
18. After Resuming the EB power Follow the Point no 14&15.And change over the RMBH , CCR and CMBH DG to normal power.

Emergency / Emergency Shut OFF:

1. If electrical shock injury or burn are there, give First aid and inform to the Safety department or Call Emergency number 3108/9865152222/9750963761.

Records/Annexure:

1. JSA as enclosed below.

JOB SAFETY ANALYSIS :(JSA)

Job Safety Analysis	Job: Resume the power during blackout	Date: 01 – 04 - 2014	Analysis by: Shift Incharge	Reviewed by: Section Head
Title of employee doing job: shift engineer / Electricians	Supervisor: Shift In charge	Department: Electrical	Section: All Section	Approved by: Electrical HOD
Req'd/recommended PPE: Safety helmet, Safety shoe, Mask & Gloves.				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Approaching the LC during black out in night	Hit with objects and fall	Go with torch light	Torchlight may not work due to not charging	To be charge in day time and ensuring by Siemens in charge.
Change over form normal to DG and vice versa.	May be flash over.	Fallow instruction of changeover.	Lacking of aware	Periodical pep talk.