



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



Issue No. 01	Rev. No: 00	Effective Date: 01.05.2016	SOP/Elect /41
Issued By: S & P		Approved By: Elect. & Inst Head	
SOP For Electrical work in Natham water works			

Scope/Purpose : This procedure to establish safe operation of all kind of electrical activities in Natham water works.

Responsibility : Shift Supervisor – Electrical

Accountability : Head-Electrical

PPE:

1. Safety shoe/Boot,
2. Safety Helmet
3. Rubber Gloves

Tools:

1. Insulated tools

Hazard Analysis:

Risks associated

Electric shock
Flashover

Mitigating Measures

Ensuring SOP for on-line & off-line maintenance activities
Ensuring SOP for switching operations

Training needs:

1. Usage of tools and Nature of Hazards
2. Usage of PPEs

Procedure:

- a) Get work permit form the section head.
- b) Give information to civil department and site operator regarding maintenance activity.
- c) Get TNEB concurrence for transformer maintenance.
- d) Get concurrence to start DG if required to provide alternate supply.
- e) Ensure feeder locking during usage of alternate supply sources.
- f) Switch off the feeders and provide LOTO.



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- g) Ensure the equipment is isolated from all kind of energy sources.
- h) Check the equipment as per maintenance check list.
- i) Replace the faulty components if required.
- j) Fill the check list and record the details.
- k) Ensure the equipment is normalized for original operating conditions.
- l) Clean the work site.
- m) Get clearance for restoration of energy sources from the section supervisor.
- n) Clear the LOTO and energize the feeder.
- o) Give information to civil department and site operator regarding completion of work.
- p) Normalize the condition of energy sources as original.
- q) Ensure the running condition of equipment as before.
- r) Return the work permit.

Emergency / Emergency Shut OFF:

1. If any injury is there, and inform to the safety department or call Emergency number 251 / 222 / 555 /9842994062.

Records/Annexure:

1. JSA is enclosed below.



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JOB SAFETY ANALYSIS: (JSA)

Job Safety Analysis	Job: Electrical works in Natham water works	Date:	Analysis by:	Reviewed by:
Title of employee doing job: Electrician	Supervisor: Section Supervisor	Department: Electrical	Section: Plant	Approved by:
Req'd/recommended PPE: Safety shoe, safety helmet & Rubber Gloves.				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Switching operations	Electric shock	Usage of Safe operating procedure & tools	Contact with live parts	Ensure updated SOPs & certified tools are used
	Flashover	Usage of Safe operating procedure	Existence of back feeding supply	Ensure lock mechanism are intact
	Breaker handle bouncing	Usage of proper designated tools	Damaged operating tools	Ensure certified tools are used
Start-up of DGs	Flashover	Ensure healthiness of all parameters	Failure of protection circuit	Ensure healthiness of protection circuit
Maintenance activities	Electric shock	Usage of Safe operating procedure & tools	Contact with live parts due to un-discharged electrical parts	Discharge the equipment before start of work
Feeders normalization	Electric shock	Usage of Safe operating procedure & tools	Contact with live parts	Ensure updated SOPs & certified tools are used
	Breaker handle bouncing	Usage of proper designated tools	Damaged operating tools	Ensure certified tools are used