

ANNEXURE - A

MAINTENANCE SCHEDULE OF TRANSMISSION LINES
(220KV LINES)

Sl. No.	Name of Activity	Frequency
A	Ground inspection by lineman/team 1. Normal terrain(Location: Misa to Killing) 2. Vulnerable terrain(Location: some portion from Misa to Killing) 3. Most vulnerable terrain(Location: few locations from Misa to Killing)	Once in 3 months (pre & post monsoon). Monthly Every 15 days
B	Inspection of towers after climbing the tower 1. Frequent tripping of line on line fault and fault is untraceable during ground patrolling. 2. Stretches having component failure history	On need basis - do -
C	Punctured insulator detection in insulator failure prone stretches	On need basis
D	Signature print outs using off line fault locator	Annually during AMP depending upon criticality of the line.
E	Attending of defects	
1	Foundation-backfilling/soil removal	Immediately
2	Attending of crack of chimney	Immediately
3	Attending damage of revetment/retaining walls	Earliest opportunity
4	Replacement of danger/number/phase/circuit plates	Within 3 months
5	Replacement of missing/damaged tower numbers	Immediately
6	Cutting of trees which does not require shut down	Immediately
7	Cutting of trees which requires shut down	Immediately
8	Replacement of broken/damaged insulators in normal area(three or less per string)	Immediately
9	Replacement of broken/damaged insulators in normal area(more than three string)	Immediately
10	Replacement of broken/damaged insulators in normal area(two string)	Immediately
11	Cleaning of insulators in polluted area	
	(i) Critically/heavy pollution	Half yearly or less as per site requirement
	(ii) Normal/light pollution	Yearly
12	Attending of damage to conductor by temporary method	Immediately
13	Attending of damage to conductor by permanent method	Half yearly
14	Attending of failed spacer-dampers/spacers (i) Causing conductor damage	Half yearly

	(ii) Hanging/dislocated spacer-dampers	Yearly
15	Attending of hot spot	Immediately
16	Temp. measures for land slide/sinking of foundation	Immediately
17	Tightening of B&N/anchor bolts	Immediately
18	Re-fixing of vibration dampers of conductor/earth wire	Yearly
19	Replacement of damaged corona rings/arcng horns	Yearly during AMP
20	Attending of damage to tower earthing	Immediately
21	Replacement/re-fixing of damaged/missing copper bonds	Immediately

N.B.:

1. Criteria for vulnerable terrain:

- Forest, hills, hill slopes containing tall trees on uphill slides.
- Affected by natural reasons i.e. pollution/flood/landslides etc.

2. Criteria for most vulnerable terrain:

- Critical land slide

STANDARD FORMATS FOR MONTHLY REGISTERS

101	Defects record. Any defect observed by operation staff or maintenance staff to be recorded here. It should be linked with PTW record.
102	Permit to work. This format is to be used for works requiring shutdowns for permit to work.
103	Outage details

Form No: 101

Record of issued PTW

Month

Name of line/ICT

Sl. No.	PT W No.	Requested on		Name of equip.	Details of Isolation	Issue of PTW				Cancellation of PTW				Remarks
		Date	Time			Date	Time	Issued by	Received by	Date	Time	Returned by	Cancelled by	

Note: Column spacing to be adjusted/modified as per site requirement.

III. RECEIPT:

I hereby declare that I have inspected and have satisfied myself that such equipment has been switched off and isolated, where the work is to be carried out. I also accept responsibility for carrying out work on equipment detailed on the permit and that no attempt will be made by me or by any man under my control, to carry out work on any other equipment.

Signature :

Name :

Designation :

Date : Time :

RETURN OF PERMIT TO WORK

1. DETAILS OF WORK DONE:
2. RESTRICTIONS, IF ANY, ON THE EQUIPMENT BEING RETURNED TO SERVICE:
3. CLEARANCE:

I hereby declare that all men and material have been withdrawn and warned that it is no longer safe to work on the equipment specified in the permit and all tools and additional earths are clear and equipment is ready for charging.

Signature :

Name :

Designation :

Date : Time :

IV. CANCELLATION OF PERMIT TO WORK

1. PTW cancelled and entry made in PTW register on page No.....
2. SEQUENCE OF NORMALISATION:
 - i)
 - ii)
 - iii)

Signature :

Name :

Designation :

Date : Time :

Form No: 103

Substation:.....

OUTAGE DETAILS

(Element wise chronological listings)

Element Name	Event No.	Outage		Restoration		Duration of outage					
		Date	Time	Date	Time	Attributable to MeECL					

Note: Column spacing may be adjusted as per site requirement.