

CHAPTER : 10**SAFETY AND LINE CLEAR PERMITS****10.1 SAFETY STANDARDS:**

- 10.1.1 The "Safety Standard" issued separately formulates the precautions to be taken for ensuring safety for the general public, consumers of electricity and the workmen. This forms an integral part of this Code and STU/transmission licensee and all the users shall comply with this Standard.
- 10.1.2 STU/transmission licensee shall prepare his own "Safety manual" for the transmission lines; Substations based on this standard. For the guidance of the Shift Operators, "Operation and Maintenance Manuals" for each Sub-station shall be prepared by the licensee. These manuals shall contain all the maintenance and operation schedules based on the recommendations of the manufacturers of the various equipments installed in the Sub-station. These manuals shall be periodically reviewed based on the experience gained and replacement of equipments. A maintenance register for the equipments including the station batteries shall be maintained at the respective Sub-stations. These shall be updated as and when the maintenance work is carried out and shall be periodically reviewed by the appropriate higher authority in whose control the sub-station falls. Similar registers shall be maintained for the transmission lines.
- 10.1.3 The operation manual shall clearly contain the details of isolation and earthing to be provided for allowing work on the equipments. The single line Diagram of the Sub-station indicating the positions of various isolating devices shall be prominently displayed in the sub-station. Charts showing the clearances from live parts (section clearance) for working on the isolated equipments where workmen are allowed to work shall be displayed prominently at each sub-station.
- 10.1.4 The danger boards as required in the IE Rules, 1956 which are in force for time being and relevant Indian Standard shall be displayed at places approachable by the general public.
- 10.1.5 Regular maintenance shall be carried out on all the transmission lines in accordance with IS:5613 and records of all these shall be maintained. Wherever possible hot line checking and replacement of failed insulators shall be made before and after monsoon.
- 10.1.6 All the equipments in the receiving stations and sub-stations shall be maintained in good condition as per the manufacturer's manuals and relevant Indian and/or International standards, wherever available. The relays and circuit breakers shall be checked for their proper operation whenever these are taken out for maintenance purposes. The station batteries shall be maintained in good working condition by carrying out routine checks and maintenance works. The DC system provided in all these stations shall be properly maintained with no appreciable leakage current. An on-line monitoring system for monitoring of leakage and detection of ground faults shall be provided.

10.2 Line Clear Permit (LCP):

- 10.2.1 The format under Annexure "E" and "F" shall be used to request for permit to work on electrical line or equipment and to return the permit when the work on electrical line or equipment is over.