		6. Exit signs shall be provided near doors for personnel escape in case of emergency. 7. In offsite pump houses, overhead cable tray arrangement shall be followed. However, cable trenches may be considered below switchgear/mcc. 8. All cable trenches shall be sized depending upon the number of cables, and their voltage grade. 9. HV, MV, LV and control cable shall be separated from each other by required spacing or running through independent pipes, trenches, or cable trays as applicable. 10. Cable trench inside substation shall be filled with sand, pebbles or similar non-flammable materials or covered with incombustible slab. If the significant number of cables are taken on racks, adequate support to be provided on the side wall of trench. 11. RCC covers of cable trenches should be sealed to avoid ingress of chemicals and oils. 12. Concrete line cable trenches should be sealed against ingress of liquid and gases wherever trenches leave a hazardous area or control room or substation. 13. Above ground cable tray shall be well supported suitably at every 3meters interval and protected against mechanical damage. Routing shall be decided to avoid proximity to high temperature source. 14. Cable trays, racks and trenches shall be sized to allow for 10 to 20% future cable reserve. 15. Instrument and communication cable shall not be laid in the same trench/tray along with electrical power cables. 16. For LT switchgear/MCC room at EL 0.0M, minimum 1400 wide x 1400 deep cable trench shall be provided to route the cables. Horizontal cable trays shall be routed in cable trenches. 17. Cable cellars shall be provided with fire detection and monitoring device. **18.** Cable trenches in hazardous area should be filled with sand and covered with RCC slab to prevent accumulation of flammable gases/vapour inside the trench.
12	**HT Power Cables**	1. IS:7098 (Part -II) Specification for Cross linked polyethylene insulated PVC sheathed cables. Part-II: For working voltages from 3.3 KV upto and including 33 KV. 2. The cables shall be suitable for laying on racks, in ducts, trenches, conduits and underground (buried) installation with chances of flooding by water.