



An IS 15700 : 2005 Certified Department

No : B4-1501/2020/CEI

Thiruvananthapuram

Date: 28/05/2020

From

The Chief Electrical Inspector  
Thiruvananthapuram

To

All Deputy Chief Electrical Inspectors/Electrical Inspectors.

Subject :- Guidelines for stringing Communication/Optical Fibre Cable on Distribution Network Power Line Supports - regarding.

Reference :- Nil

The following guidelines are issued for stringing Communication/Optical Fibre Cable on Distribution Network Power Line Supports

1. A minimum ground clearance of 4000mm shall be maintained for Optical Fibre cables taken along the street.
2. When cables are drawn across the road, a minimum ground clearance of 5800mm shall be maintained.
3. A minimum vertical clearance of 1200mm shall be maintained for Optical Fibre cables from lowest power conductor when run under LT lines and 2440mm from 11kV lines.
4. All Dielectric Self Supporting (ADSS) cable shall possess good performance characteristics such as anti-impact, anti-vibration, anti-bending, prevention of thermal aging, flame retardant and UV protected.
5. ADSS cable specification shall conform to the latest editions of the relevant International Electro Technical Commission (IEC), IEEE and BIS.
6. Elements consisting of ADSS cable shall be non-metallic, shall possess anti-electromagnetic, strong endurance of electrical effect and in worst case scenario no electricity should be conducted from the surface of the ADSS cable, when charged electrical conductor touches the surface of ADSS cable.
7. In work sites, all metallic equipment including hardware anchors and structures shall be common bonded together and then grounded to ensure safety. ADSS cable shall be grounded between the work area and the spans when splicing ADSS cable during wet or rainy conditions near active high voltage phase conductors for preventing dangerous leakage currents and transients from flowing through personnel.
8. Pole Attachment Hardware / Brackets and supporting assembly for Fiber Optic Cable in electric poles shall be earthed.
9. Optical Fiber Cables Should not pass through/connected to Transformer Structures
10. Maximum of two cables of all service providers put together per pole may be allowed due to technical constraints and electrical safety concern.
11. Erection of cables and subsequent maintenance of the network shall be carried out under the supervision of the authorized person of the Utility adopting all safety precautions. No such works shall be carried out on the electric poles from 6PM to 8 AM except on emergency situations.

12. Copy of the agreement with the KSEB Ltd/Licensee and sanction received, if any shall be forwarded while applying for Safety Certificate.
13. Optical Fibre Cables should not be run above the power lines. It should always be below power lines.
14. Pole Attachment Hardware / Brackets and supporting assembly for Optical Fibre Cable shall be fixed to the utility pole, such that, a minimum horizontal clearance of 130mm is maintained between the cable and the pole.
15. Power supply to the booster unit/Optical Amplifier unit/MUX, if required, should not be taken directly from the power lines. The primary supply to the such units shall be controlled by an MCB/MCCB and 30mA rated ELCB. The power cubicle shall be effectively earthed.
16. When crossing of Public/Private Property, necessary consent from appropriate agency shall be obtained.
17. The network shall be subjected to periodical inspection by the Electrical Inspector and fee for such inspection prescribed by the Government shall be paid on demand.
18. Statement giving details of number of customers,length of cable network, route map shown, number of poles, number of power connections availed for amplifiers/node, area of jurisdiction of the supplier (Electrical Section) shall be furnished to the Deputy Chief Electrical Inspector/ Electrical Inspector at the end of every financial year ending on 31<sup>st</sup> March.
19. Details of the customers, including name, address etc shall be maintained at the administrative office and made available when called for.
20. The relevant provisions of Regulation 68 & 69 of Central Electricity Authority (Measures relating to Safety and Electric Supply), Regulations,2010 shall be strictly adhered to.
21. Safety Provision under Electricity Act 2003 and Central Electricity Authority (Measures relating to Safety and Electric Supply), Regulations,2010 shall be strictly adhered to.
22. The installation shall conform to IS/IEC 60794: 2001.



Chief Electrical Inspector

Copy to :-

1. CA to CEI.
2. CA to Additional CEI.
3. All Technical Officers.
4. B Section.
5. Stock File.