

**Government of Kerala**  
**Department of Electrical Inspectorate**  
**Office of the Chief Electrical Inspector**

No: B1-5801/2004/CEI

Trivandrum  
Date : 12.04.2005

**Circular**

**Subject:** Additional guidelines to be followed in the scrutiny of Electrical Schemes –

**Reference:**

1. Suggestions forwarded by The Kerala State 'A' Grade Electrical Contractors' Association
2. Discussions held on 26.5.2004, 4.11.2004 and 12.1.2005 by the Technical Committee formed to formulate technical standards.

The following additional guidelines are to be followed in the scrutiny of Electrical Schemes, on account of modern trends in electrical equipments.

**1. Use of Aluminium XLPE Cable instead of Aluminium PVC Cable on the MV/LV side.**

When using Aluminium XLPE cables, 15 percent more current carrying capacity is allowable when compared to Aluminium PVC cables of the same size.

**2. Use of Current limiting type MCCB**

For Current limiting type MCCBs, the time of short circuit withstand capacity of cable (short time rating) shall be taken as 500 milliseconds.

**3. Use of Microprocessor based ACB**

Microprocessor based ACBs proposed in place of Relays shall have all facilities as per the requirements of the user. Microprocessor based ACBs having built in releases with Time and Current settings can be permitted.

**4. Reduction in cable size from ABSFU to Transformer.**

XLPE ( Aluminium ) cables of minimum 70 sq.mm. size can be permitted between ABSFU and Transformer instead of 150 sq. mm. XLPE Aluminium cables

**5. Bus Trunking on Secondary side of Transformer**

Bus Trunking is insisted on the Secondary side of Transformer of capacity 750 kVA and above.

**6. Use of Armoured Copper Cable from Generator to Breaker.**

Armoured Copper Cable of adequate size (4 x 400 sq.mm) may be allowed to be used between Generator and Breaker for Generators of capacity 750 kVA, instead of Bus Trunking.

**7. Submission of old Approved Drawings**

When schemes for additions / alterations are submitted, latest Approved Drawings of the concerned part of the installation is sufficient for verification.

**8. Copy of Contractors' Licence**

Copy of Contractors' Licence is sufficient for submission for verification of validity of Contractors' Licence along with Scheme. Requirement for personal appearance of Contractor and Supervisor is not needed. Supervisor shall be present at the time of inspection.

  
Chief Electrical Inspector.

To

1. ✓ All Electrical Inspectors ✓
2. The Deputy Chief Electrical Inspector, Emakulam
3. Additional Chief Electrical Inspector
4. Deputy Chief Electrical Inspector, C.E.I. office, Thiruvananthapuram
5. All Electrical Inspectors / Deputy Electrical Inspectors/ Assistant Electrical Inspectors of Chief Office
6. C.A. to C.E.I.
7. The Secretary, The Kerala State 'A' Grade Electrical Contractors Association
8. All members of the Technical Committee
9. Stock file.