OFFICE OF THE CHIEF ELECTRICAL INSPECTOR TO GOVT. OF KERALA.

No:B1-10442/2006/CEI.

Thiruvananthapuram Dated:31-05-2006

CIRCULAR

Sub:- General guidelines for Scrutiny and Inspection. Ref:- Circular No: B1-14113/01/CEI dated 24-5-2001.

In supersession to the circular cited under reference the following guidelines are issued for the scrutiny of Electrical Schemes.

1. Moulded case circuit breakers (MCCB) with short circuit current breaking capacities (I_{cs}) of double of prospective fault current can be permitted as controlling device at LV side of transformers of rating up to and including 400kVA. MCCBs proposed shall have isolation duty and Earth Fault release. Minimum I_{cs} value required for MCCBs proposed as controlling device at LV side of transformers are given below.

Up to 160kVA 10kA 200kVA & 250kVA 15kA 315kVA & 400kVA 25kA.

- 2. MCCBs may be permitted as outlets in MSBs irrespective of rating of transformer to which the board is connected. But these MCCBs shall have I_{cs} value above the prospective fault current.
- 3. When current limiting type MCCBs are provided, cables at down stream shall have capacity to withstand prospective fault current for a minimum of 500 milli seconds. Breakers used at down stream shall have a value above or equal to the prospective fault current.
- 4. The maximum current setting of MCCBs proposed as outlets in switch boards shall be half that of incomer MCCB. If ACB is proposed at incomer, outlet MCCBs may be set up to 80 % of ACB setting. If switch disconnector fuse units are proposed as outlets, minimum rating shall be (1/5)th of the incomer MCCB setting.
- 5. The validity of the approval shall be 2 years. After this period revalidation can be given after collecting scrutiny fee.
- 6. Isolation facility for 11kV supply should be provided at ground level for multi-storied buildings where Transformer/HT Breaker is installed on terrace floor. In cases where space is limited, Chief Electrical Inspector/Additional Chief Electrical Inspector/Deputy Chief Electrical Inspector/Electrical Inspector may take appropriate decision after site verification.
- 7. Scrutiny Fee/Inspection fee shall not be demanded for earth mats.
- 8. MRI Scan does not come under Rule 73, IER, 1956 as there is no involvement of X-Ray or High frequency equipments. However CT scan will continue to be inspected under Rule 73, IER, 1956.
- 9. Since there was no direction for unit conversion among kW/HP/kVA in the fee calculation of electrical equipments in the related Government Order, fee may be calculated as per the units directly available from the equipments/electrical drawings.
- 10. For temporary installation, separate fee is to be collected for generator. Electricity duty shall also be collected.

- 11. Buildings of height exceeding 15 meters shall be categorised as Highrise buildings. The height shall be taken from the floor at the highest level, where access form ground is possible.
- 12. For residential, commercial and industrial buildings lightning protection proposed shall be as for IS.2309/89.
- 13. Fees shall not be demanded for Metering Panel incomer isolator/Switch /Breaker.
- 14. For equipments such as X-Ray, Neon sign, Lift, Escalator and CT scanner, the fee specified in the Government Order will be inclusive of the associated Switch boards, earth electrodes, etc.
- 15. Scrutiny/Inspection fee shall not be demanded for the existing approved/sanctioned portions in schemes for additions in the premises of HT/EHT installations.
- 16. Fee shall not be demanded for contactors.
- 17. Rule 46 inspection fee for portable generators need not be demanded in advance. Routine Rule 46 inspection is not to be conducted for portable generator installations. However, if periodical inspection of portable generator is conducted along with other inspections, the inspection fee for the same shall be demanded afterwards.
- 18. The periodical returns of complaints received, offence detected and interruption report need not be sent to Chief Electrical Inspector's office.

Chief Electrical Inspector

Copy to:

- 1. The Deputy Chief Electrical Inspector, Ernakulam.
- 2. All Electrical Inspectors.
- 3. All Technical Officers of Chief Electrical Inspectors Office.
- 4. C.A to CEI and ACEI.
- 5. Stock File of B1, B3 and B4 Section.