

Annexure-4

Project : 400kV SWITCHYARD : 1 × 700 MW BELLARY TPS-III
Customer : KARNATAKA POWER CORPORATION LIMITED

FIRE PROOF SEALING & FIRE BREAKS

1.0 FIRE-PROOF SEALING OF CABLE PENETRATION

Cables / cable tray openings in walls and floors or through pipe sleeves from one area to another or one elevation to another, between the units and within the same unit, shall be sealed by a fire-proof sealing system. The fireproof sealing system (FPSS) shall effectively prevent the spread of fire from the flaming to the non-flaming side, in the event of a fire. The FPSS shall conform to relevant standard in addition to the following requirements:

- (a) FPSS shall have a fire rating of one hour.
- (b) The FPSS shall be subjected to fire endurance test, hose stream test as per ASTM-E-814/BS:476
- (c) Under fire condition, the FPSS material shall not emit excessive smoke or any corrosive or toxic fumes.

2.0 FIRE BREAK

2.1 Firebreak shall be provided by applying a suitable fire-resistant coating on cables for the required length to meet the fire rating of thirty minutes.

2.2 Firebreak shall be provided at an interval of 15 metres in the straight portion of each of the cable tray above ground, at intervals of 30 metres in cable trenches and at 5M for all vertical trays. All cable inter section and tee offs shall be provided with firebreaks.

3.0 TESTS

All routine tests shall be carried out as per relevant standards and approved GTP/QAP. For type tests, certificates for tests carried out earlier shall be furnished.