

Annexure-G

Project : 400/220 kV SWITCHYARD : 1 × 500 MW BELLARY PH-2 TPS
Customer : KARNATAKA POWER CORPORATION LIMITED, BELLARY

FIRE PROOF SEALING & FIRE BREAKS

1. FIRE –PROOF SEALING OF CABLE PENETRATION

Cables / cable tray opening in walls in 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 the following requirements:-

- 1.1. FPSS shall have a fire rating of two hours.
- 1.2. The FPSS shall be subjected fire endurance test, hose stream test, temperature measurement of non-flaming side as per ASTM-E119.'Standard method of tests of building construction and materials'.
- 1.3. The FPSS will also conform to the incombustibility test carried out in accordance with IS: 3144-1992.
- 1.4. Under fire condition, the FPSS material shall not emit excessive smoke or any corrosive or toxic fumes.

2. FIRE BREAK

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.

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