



## Disruptive Failure of Metal Clad Cut-out

During planned Rising and Lateral Mains modernisation works a 200amp Metal Clad cut-out disruptively failed badly burning an Electrician working in close proximity.

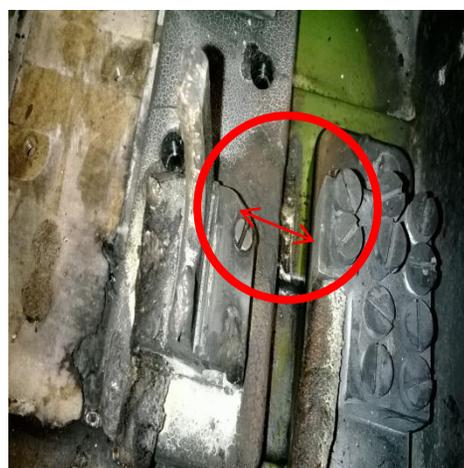
Isolation of the Rising Lateral Mains system had previously required the removal of the cut-out fuses. At this time minor degradation of a fuse carrier was noticed but this was not thought to be significant.

Following extensive examination of the recovered equipment, evidence of historic current tracking was noted between the L3 incoming phase terminal and the metal frame of the equipment.

The activities around the cut-out (isolation and installation works) may have been contributory factors to the subsequent disruptive failure.



*Failed Cut-out situated a close entrance*



*Arcing track between phase terminal and equipment frame*

## Recommendations and action points

**When removing or inserting fuses or links It is important to wear the appropriate PPE:**

- It is a SHALL requirement to wear FR coveralls fastened up to the chin and sleeves rolled down along with a minimum of light eye protection.
- Following this incident you are advised to risk assess the condition and type of cut-out and to enhance the level of PPE worn to include gloves that offer some form of FR protection and where reasonably practicable a full face visor.
- PPE shall also be worn when working on or adjacent to the service cut –out. Particular attention shall be given to actions which could affect the cut-out through vibration or other physical activities close to the cut-out unit.
- Where there is evidence that a cut-out is in an unsatisfactory state action shall be taken to remedy the identified issue through repair or replacement before work commences.
- Consideration shall be given to the replacement of “end of life” cut-outs as part of planned modernisation works.