

Safety Alert

Faulty DNO Cabinet

24 June 2021

Background information

On 15 April 2021 during a planned visit by a BMJV sub-contractors, it was identified that a 600c electrical cabinet was faulty with heat and burn damage to cables, which in turn, was sending 240v through the outside cabinet.

Immediate actions taken

- Incident reported and investigation began
- All outgoing circuits from the cabinet were isolated to reduce the risk of electric shock
- Checks of the internal wiring to determine the cause of the fault were completed

Findings

The investigation found the electrical interface unit, situated on the project boundary was faulty and the neutral conductor had become live.

This fault led to the external cabinet being live to 240 volts.

Further checks were made and identified that, the incoming DNO (Distribution Network Operator) supply cables were both live and neutral conductors were both carrying a supply voltage.



Lessons Learnt

The following are the recommended checks that electricians / technicians who interface with electrical cabinets, should do:

- A Non-Contact voltage detector should be used to check if the shell of the metal cabinet is live
- Once satisfied that the cabinet is not live, open the doors and remove the covers to the MCX0164 box
- Using an approved voltage tester and proving unit; check polarity and voltage present on the correct conductors
- Close up covers and doors
- Record and leave site