

Use of Voltage Detectors During Rainfall

Background

Several Incidents have been logged in SHIELD where MV Voltage Detectors failed to operate on live MV network during rainfall. Following investigation by ESB Networks Technical Development and subsequent manufacturer testing it has been confirmed that MV and HV voltage detectors can fail to detect the presence of voltage on live network during heavy rainfall. The issue occurs when rainwater accumulates on the shell of the detector and creates a continuous conductive film which affects its operating threshold. Technical Development are working on a solution to the issue with our current supplier of voltage detectors.



Current Requirements for Testing

ESB Networks' current policy for checking the operation of voltage detectors is :

1. a self-test before and after each use using the self-test function on the detector and
2. testing off a live source daily where possible but at least weekly.

Compliance with these requirements will ensure the correct operation of voltage detectors.

What should I do?

Managers & Supervisors:

Ensure all staff who use these Voltage Detectors receive a copy of this alert.

All Staff Using MV & HV Voltage Detectors:

1. Ensure you carry out checks before and after each use using the self-test function on the detector and testing off a live source daily where possible but at least weekly.
2. Caution should be used whilst using MV and HV voltage detectors during heavy rainfall until further notice.
3. Ensure voltage detectors are dried off after use in wet weather.

For further information please contact:

Sean O'Connell, Technical Development, Email: sean.oconnell@esb.ie or Mob. 087 657234