Decay Method

**Explanation:**

The Decay Method is the conventional fault location method for high resistance cable faults with a flash over voltage higher than 32kV.

The Decay Method is based on voltage decoupling by a capacitive voltage divider. The faulty cable is charged by applied DC or VLF voltage up to the level of the breakdown. This breakdown creates a transient wave (due to discharge of the stored energy of the charged cable, cable = capacitor) which travels between faulty point and the HV generator.

This transient wave is recorded by the Echometer IRG via the capacitive voltage divider.

The recorded period of oscillation shows the distance to the fault.

**Block diagram:**

![Block diagram image]
Measurement example: