

ABSTRACT OF THE DISCLOSURE :

When a grounding fault current from a grounding fault point flows to a feeder use circuit breaker at one side and a feeder use circuit breaker at another side via an electric power distribution loop circuit, one of first and second circuit breakers, in which both directions of the grounding fault current and a directional grounding fault detection relay are the same as well as an operation timing of a timer is the earliest, is interrupted. Thereby, the electric power can be continuously supplied to loads without interrupting all of the electric power supply service to all of the loads, when a grounding fault accident is induced at one of distribution substations in an electric power distribution installation circuit which performs a loop electric power distribution from feeders to the plurality of distribution substations. Thus a conventional problem is resolved that through combination of the grounding fault current detector and directional grounding fault detection relay the directional grounding fault detection relay at the distribution substation where the grounding fault accident is caused detects the grounding fault accident, however, at the same time the directional grounding fault detection relay at a sound distribution substation may operate depending on the



fault point, and a concerned circuit breaker unit is opened and the sound distribution substation may interrupt electric power supply service.

This Sheet Has Been Replaced

