Design of an adaptive overcurrent protection scheme for microgrids

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Abstract

Microgrid is a new phenomenon regarded to Distributed Generation (DG) penetration in the existing distribution systems. In this paper adaptive over current (OC) protection technique for a distribution system with DG penetration is proposed. This scheme takes into account general protection requirements, impacts of DG on protection system and protection coordination. A part of IEEE 13 nodes radial distribution test feeder is taken as a study case to test the effectiveness of the proposed scheme using ETAP software.

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