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SOME ASPECTS OF THE IMPACT OF DISPERSED GENERATION ON DISTRIBUTION MENAGEMENT SYSTEMS

ABSTRACT

Increased presence of dispersed generation (DG) has significant technical impact on distribution network on which it is connected. Since the distribution network with DG is not passive, all issues about planning, building, maintaining and operation of the distribution network become very interesting and need re-investigation. Actually, overall model of the distribution network should be renewed. Distribution management system functions are significantly affected by the DG. It means that the distribution management system functions should be re-considered in order to respect the presence of DG in the distribution network. In this paper some aspects of the impact of DG on distribution management system are considered, as: power flow calculations, impact of DG on voltages and losses in distribution network.

Keywords: dispersed generation, distribution management system, power flow.