

预防气体绝缘开关装置故障的超高频局部放电在线实时监控系统的

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摘要

超高频局部放电在线实时监控系统的可预防气体绝缘金属封闭开关设备(gas insulated switchgear, GIS)发生灾难性故障。介绍了超高频局部放电实时监视系统的基本结构、局部放电试验情况,并给出了该系统在韩国应用的2个实例,该系统的数据库储存了实验室条件下的各种超高频局部放电数据和现场实际运行中的局部放电信号,安装该监控系统后,非专业人员也可判断GIS的状态。

关键词 [气体绝缘金属封闭开关设备; 超高频; 局部放电; 传感器; 在线实时监控系统](#)

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On-Line UHF Partial Discharge Monitoring System for Prevention of Failures in Gas-Insulated Switchgears

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Abstract

By means of on-line ultra high frequency (UHF) partial discharge (PD) monitoring system the catastrophic failures, which may occur in gas-insulated switchgears (GIS), can be prevented. In this paper the basic structure of on-line UHF partial discharge monitoring system and the partial discharge tests carried out in laboratory for the purpose of verifying this system are presented. In addition, two practical cases of applying this system to the substations in the Republic of Korea are given. Various UHF PD data in the environment of laboratory as well as on-site PD signals are stored in the database of this system, thus once this system is installed in substation, non-professional people can also judge the state of GIS.

Key words [gas insulated switchgear; ultra high frequency; partial discharge; sensor; on-line monitoring system](#)

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