

47. SURGE TECHNIQUE BASED FAST FAULT LINE-SECTION LOCATION FOR DISTRIBUTION SYSTEM USING DWT

S.SAMUDI1, N.JAYANTHI2

1- Master Scholar, Department of EEE, 2-Asst professor, Department of EEE,
Priyadarshini Engineering College, Vaniyambadi, Vellore, India
samudiarun23@gmail.com, jayanthi1.nathan@gmail.com

Faults occur anywhere, anytime in power distribution system irrespective of load demand and supply. Even the high consumption is also considered to be a fault. There exists a confusion always, when the load current increases, whether it is a short circuit current or a high load current. So there should be always a system to identify such short faults properly. Fault indicating devices such as fault indicators have been widely used in distribution systems. FIs use to improve reliability and reduce outage duration. FIs with communication interfaces are integrated into distribution automation (DA) to further reduce fault-finding time by reporting FIs' statuses back to control center. Faults occur on transmission line a lot of alarms and fault information are received from Outage Management System (OMS), Trouble Call System (TCS) and Customer Information System (CIS) and are shown to system operators to collect the fault information. In this proposed method Surge technique is used to identify the multiple faults on transmission line and also find the type of fault. DWT use to find out the time instant of fault occurs on TL.

Index Terms—Transmission line, Distributed automation, Fault indicator, Distributed generator, Fault line-section location.

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