

System-based Protection Testing – state of the art simulation-based verification of protection system behavior

Solutions: CMC-Family, RelaySimTest

Summary: Learn how to efficiently create application-oriented protection tests with RelaySimTest. Explore a

comfortable way of end-to-end testing using the TestSetRemoteAgent. Get familiar with the test procedure in hands-on and theoretical sessions. Work with special test set-ups to gain immediate

testing experience.

Prerequisites: Basic knowledge of protective relaying and protection testing

Duration: 2 days Language: English Code: C.0149.AAA



Objectives

Exploring the benefits of application-oriented testing in comparison to parameter testing



- > Simulating faults to test the behavior of your protection systems
- > Using RelaySimTest from scratch



Content



- > Introduction to application-oriented testing
- > Definition of suitable test cases for different protection schemes
- Modelling of test grid topologies in RelaySimTest



- > Application-oriented distance protection testing
- > Iterative closed loop testing of the autoreclosure function
- > Easy end to end testing of distance teleprotection and line differential protection
- > Testing of the power swing blocking function of a distance protection relay
- > Easy end to end testing of line differential protection taking CT saturation into account



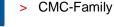
- > Short introduction to further test applications (e. g. busbarprotection testing)
- Synchronized injection with TestSetRemoteAgent and CMGPS588



Solutions



> RelaySimTest, TestSetRemoteAgent





Audience

Technical staff from utilities, transmission and distribution networks, service companies and manufacturers involved in protection testing or grid simulation