




Online Course: Automated Power System Protection Testing

 5 days

 English

 oCprs19en

You will learn how to efficiently test overcurrent, distance and transformer differential relays with the OMICRON Test Universe. Become familiar with the test procedures in virtual sessions.

Objectives

- ▶ Performing commissioning, trouble-shooting and periodic tests of protection relays
- ▶ Testing overcurrent, distance and transformer differential relays with the OMICRON Test Universe
- ▶ Creating and modifying test plans and customized test reports
- ▶ Using the OMICRON Test Universe from scratch

Content

- ▶ Power system protection principles and typical substation topologies
- ▶ Overview of protection testing basics
- ▶ Introduction to the OMICRON Control Center (OCC) and relevant test modules
- ▶ Modelling of the relay characteristics in the Test Object for subsequent testing
- ▶ Test setup and configuration options for the CMC test set
- ▶ Quick current and voltage output for easy wiring tests
- ▶ Fundamentals of non-directional overcurrent protection functions
- ▶ Creating a reusable test plan (OCC file) for testing non-directional overcurrent relays
- ▶ Fundamentals of distance, ground fault and transformer differential protection functions
- ▶ Creating a reusable test plan for testing distance relays
- ▶ Creating a reusable test plan for testing transformer differential relays
- ▶ Testing ground fault protection with RelaySimTest using realistic network simulation
- ▶ Demo of testing overcurrent, distance and transformer differential relays

Solutions

Control Center, QuickCMC, Ramping, Pulse Ramping, Overcurrent, Advanced Distance, State Sequencer, Advanced Differential CMC-Family

Audience

Technical staff from electric utilities, service companies and manufacturers involved in protection testing

Prerequisites

Basic knowledge of power system protection