Protection Testing for Advanced Users – automatic verification of distance and differential protection systems

Solutions:	CMC-Family, Test Universe
Summary:	Learn how to efficiently test distance and transformer differential relays with the OMICRON Test Universe. Get familiar with the test procedure in hands-on and theoretical sessions. Fully exploit the benefits of automated testing, reusable test templates and enjoy the consistent test quality.
Prerequisites:	Basic knowledge of power system protection, or ideally attendance of the course C.0075.BBB

Duration: 2 days Language: English Code: C.0076.BBB

Objectives

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

Content

> Configuration of the test object parameters and the test hardware
> Creating test plans which adapt automatically to newly entered relay settings
> Theory and testing of directional overcurrent protection
> Theory on distance protection and creating a flexible test plan for distance relays including testing the trip times and zone reaches as well as switch on to fault (manual close) and auto-reclosing
> Hands-on testing of distance relays
> Theory on differential protection and creating a flexible test plan for transformer differential relays including testing the stability during external faults, the tripping characteristic, the trip times and the harmonic restraints
> Hands-on testing of transformer differential relays

Solutions

> Control Center, XRIO, Overcurrent, Advanced Distance, State Sequencer, Autoreclosure, Advanced Differential
> CMC-Family

Audience

Technical staff from utilities, transmission and distribution networks, railway grids, service companies and manufacturers involved in protection testing