

# Integrated Power System Analysis Software

## Generation·Transmission·Distribution·Industrial

PowerFactory comes with fully integrated modeling features for distance and overcurrent protective devices including fuses, LV circuit breakers, directional elements and differential relays. Device response tests can be performed on basis of any type of system fault, load flow calculation or with a complete event sequence using the stability or EMT function. Relay co-ordination is greatly supported with various graphical and script tools.

# Protection

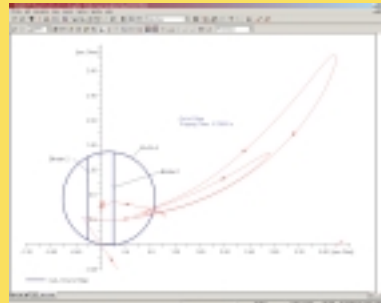
### Distance Protection

- MHO- and polygonal characteristics
- Starting characteristics
- Different polarization methods
- Dynamic MHO characteristics
- Out of step tripping relays
- Power swing blocking zones
- Programmable logic elements
- Tele-protection schemes
- R-X diagrams
- Time-distance diagrams
- COMTRADE Interface



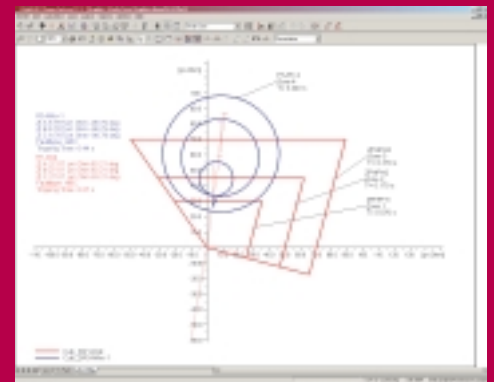
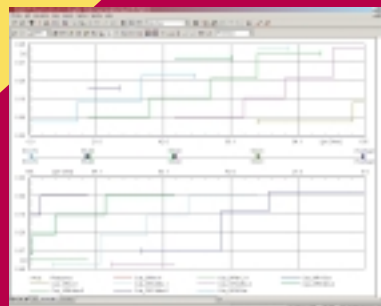
### Overcurrent Protection

- Definite time
- All ANSI/IEEE characteristics
- Analytical formulas
- Interpolated samples
- Selectivity diagrams



### Extensive Relay Library

- Overcurrent-time relays
- Differential relays
- Fuses
- LV-circuit breakers
- Directional elements
- Reclosers
- Cable and transformer damage curves
- Motor starting characteristics
- CT saturation



### Supported PowerFactory Functions:

.... balanced and unbalanced power flow, fault analysis, harmonics, frequency scans, stability, EMT simulation for three-, two- and single phase AC systems and DC systems.; protection simulation and co-ordination, distribution-, transmission- and generation reliability, small signal analysis (eigenvalues), static and dynamic voltage stability, active and reactive power dispatch, state estimation; open tie optimization, optimal capacitor placement, cable sizing; built-in automation interface (DPL), ODBC driver, interfaces for GIS and SCADA integration; PSS/E compatibility...

# SILENT DIG

## PowerFactory

Power System Planning,  
Analysis and Optimization  
for Windows

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