

Engineering Courses

Protective Relaying Fundamentals

Training objectives:

The participants will learn the fundamentals of power system protective relaying. They will learn the art and science in the application of protective relays in electric power systems. This includes applications for rotating machinery, transformers, buses, transmission and distribution.

The course is intended for:

Engineers working for utilities and related “power” industries that are responsible for the application of power system relaying.

Main features:

- Power system overview and analysis of fault conditions
- Introduction to IEEE and IEC protection standards
- Instrument transformer operating principles and applications
- Electro-mechanical relay philosophies and applications
- The evolution of microprocessor based relays
- Basics of transformer protection including current differential, overexcitation and overcurrent
- Bus configurations and forms of bus current differential protection
- Transmission line overcurrent, distance, and high speed protection
- Motor protection including voltage variations, frequency variations and overload conditions
- Generation protection for fault conditions and abnormal operations
- Use of power system analysis software for basic fault current calculation and relay coordination
- In-class examples for students and instructor to work through

Recommended prior knowledge:

Basic knowledge of power systems analysis.

Note: The course is held in English. Class subject to change. Class times are 8-4.

For more information visit: www.geenergyconsulting.com



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