



High voltage line protection



OBJECTIVE

Understand the methodologies, devices and protection systems most commonly used in transport lines.



AUDIENCE

Engineers involved in electrical protection, as well as those who are interested in exploring these systems.



CONTENT

Introduction to overhead voltage lines

- Overhead line parameter calculations
- Phenomena behind line faults
- Statistics of overhead line faults

Calculation of short-circuit currents

- Fundamentals of short-circuit calculation
- Analysis of parallel and series faults
- Special situations and calculation limitations

Current transformers and power transformers. Magnitude adaptations

Logic and analogue relays: measurement basics

Overcurrent protection

- Fundamentals of current detection protection
- Protection schemes (directional overcurrent relays, single-phase protection)
- Limitations to overcurrent protection
- Selectivity and coordination

Distance protection

- Basics of distance protection
- Impedance measurement techniques
- Applications and limitations of distance protection
- Specific problems linked to distance protection application

Communications. Teleprotection

- Communication requirements in power systems
- Basic principles for communications and teleprotection
- Distance and directional comparison protection

Phase-comparator techniques

Protection for tie-lines, multi-circuit and multi-terminal lines. Applications

Transport lines reengaging and Distribution lines reclosing and fault locator

LIVE ONLINE TRAINING

Duration: 18 hours

More information and registration here:

<https://bit.ly/HitachiGridAcademy>