

# Bachelor Thesis

## Commissioning and first-time configuration of protection devices for transmission grids

### Situation and motivation

In order to stay up to date in the field of digital protection technology, various new protection devices are being purchased at the Institute for Electrical Power Systems. These protection devices are differential protection and distance protection devices. They shall be integrated into an existing network structure.

During commissioning, these protection devices shall be configured for representative fault conditions.

### Research questions

- Which fault cases are representative for commissioning?
- What is an adequate implementation into the existing network model?

### Approach/Methodology/Task

- Screening of the documentation of the protection devices
- Planning and execution of the integration into the network model
- Creation of a fault scenario for commissioning
- Commissioning and documentation

### Organizational Issues

Start Immediately!

### Contact Person/Supervisor

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Figure 1 Protection cabinet at IEAN