Institute of Electrical Power Systems

Bachelor Thesis

Implementation of a standardized interface for the Co-simulation of calculation programs

Motivation

According to the individual technical areas, specialized calculation programs have been developed over many years, each of which covers a special area. In order to be able to use the substantial advantages of the individually developed programs, the possibility exists over standardized interfaces different programs to run parallel. The widespread possibility represents the so-called Functional-Mockup-Interface.

Research Topics

- How can the calculation programs DIgSILENT PowerFactory and Matlab Simulink be connected via the Functional-Mockup-Interface?
- What advantages does this offer compared to using them separately?
- How can so-called functional mockup units be exported and integrated as block elements?

Procedure/Methodology/Task definition

- Literature research on FMIs/FMUs
- Creating of a simple model to test the coupling
- Coupling of an inverter model
- Documentation

Organisational Issues

Begin immediately

Contact Person/Supervisor

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