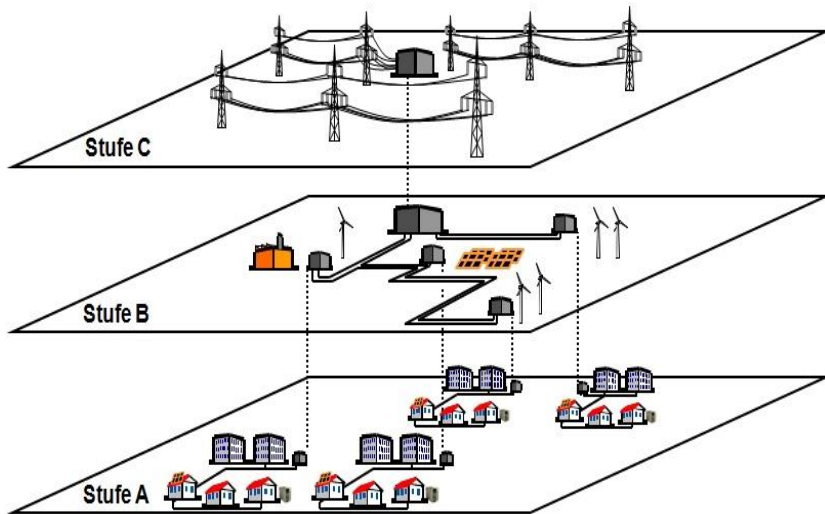


Reactive Power in the Future Grids

Motivation

Uncorrected reactive power makes it too hard for stabilizing the network voltages. Moreover, it will be the cause of additional costs throughout the entire network since all the power systems components such as cables, transformers, and generators must be sized to carry the total current. In the future grids a large number of decentralized generation will exist, therefore the implications of reactive power injection through these sources have to be analyzed.



Objectives

- Evaluation of the implications of reactive power injection into LV networks on the voltages at LV and MV levels
- Proposing a reactive power control algorithms for maximizing the voltage stability of the grid

To these challenges and your own proposals within the scope of this subject I can supervise students **(student work, bachelor, and master works)**. Interested students can contact me. The thesis will be written in English language.