

# Zusammenfassung

Der zunehmende Einsatz von dezentralen, regenerativen Anlagen zur Stromerzeugung führt aufgrund ihrer starken Wetterabhängigkeit zu erhöhter Planungsunsicherheit und verkürzten Planungshorizonten bei Energieversorgern. Wurden bei diesen früher vor allem statische Planungsmethoden genutzt, bedarf es zukünftig komplexerer Prognosemethoden. Im Rahmen dieser Arbeit soll daher eine Methodologie zur Auswahl des Prognoseansatzes für die Wirkleistungsprognose im Hinblick auf Rechenaufwand, Genauigkeit, Prognosesicherheit sowie den damit verbundenen wirtschaftlichen Einsparpotentialen für Verteilnetzbetreiber entwickelt werden.

## Abstract

The increasing use of decentralized, regenerative energy sources in electrical grids leads to increased planning uncertainty and short-term strategies for energy suppliers due to their strong dependence on weather. In the past, static planning methods were mainly used for these, but in the future more complex forecasting methods will be required. Within the scope of this thesis, a methodology for the selection of a forecasting model for the active power prediction with regard to computational effort, accuracy, reliability and associated economic importance for distribution network operators is to be developed.

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