Hochschule Flensburg
University of Applied Sciences

Wind Energy Technology Institute

Ringvorlesung SS 2019

Vortragsreihe des Wind Energy Technology Institute der Hochschule Flensburg

29.04. Introduction of wind and solar power forecasting integration into power system operation

WEPROG GmbH Germany

The lecture focus will be on the integration of wind and solar power, also referred to as renewable energy sources (RES), into the operation and management of the electrical grid. RES are characterised by their variable, weather dependent generation. Once the amount of RES has reached a certain level of generation capacity, this poses a paradigm shift to the way the electric grid must be operated. Without forecasts of their generating capacity, such variable generation can no longer be handled efficient nor economic.

In the next generation power system where large amounts of intermittent and renewable energy sources (RES) are the central part of the generating capacity, forecasts of these sources need to advance further and probabilistic forecasting methods will be required in order to handle uncertainties that are inherent in the generation of power from these generating sources.

The basics of uncertainty forecasts, the required input data from measurements and how to adapt forecasts to measurements will be explained and some uncertainty specific terminology will be introduced. The associated applications will be shown in real-world examples and how they are about to develop in major parts of the power industry.

Corinna Möhrlen, PhD manag. Director, WEPROG GmbH Germany

29.04.2019 **18:00 Uhr** im **WETI**

Nordstraße 2