

Steve Völler

Home country: Germany
Year of birth: 1979

Diploma Degree: Electrical Engineer
University: Chemnitz Technical University, Germany
Graduation year: 2003

PhD: University of Wuppertal, Germany, 2010
PhD title: Optimized Operation Management of Wind Energy Plants by Energy Storage

Recent position: Postdoc
Supervisor: Gerard Doorman
Postdoc start: 03/2010

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Postdoc title: **Balance Management with Large Scale Offshore Wind Integration**

Description: The background is that large amounts of wind power create a need for other generation and/or demand resources to compensate for the variability and uncertainty of wind production. The research covers the quantification of the variability and uncertainty of the offshore wind farms, opportunities for the balancing control of the Norwegian power system, international energy exchange and trade and effects to the power grid. The main focus lies on the Norwegian power system and especially the hydro power system. How will the Norwegian system change or have to be changed under different future trends in the European power system.
This will be done by using different models of the European power grid, including different HVDC grids, wind scenarios, changes in the power system (e.g. shut-down of and new built power plants, influences of other renewable sources, energy storage...).