



Project description

The project team has already developed a high-fidelity CFD model of the wake of a horizontal axis wind turbine (*Sedaghatizadeh et al., 2017 and Mo et al. 2013*). In this project the wake of tandem wind turbines will be studied by further development and application of the developed model.

Primary aim

The primary aim of this project is to apply the developed hybrid LES model to understand the effect of a wind turbine wake on fatigue load and noise generation by wind farms.

Secondary aim

The secondary aim of this project is to apply the developed hybrid LES model to understand the effect of a surface roughness and topography of the area on a wind turbine wake.

Student attributes

Applicants with a strong background in fluid mechanics and heat transfer with a Bachelor (honours H2A or higher) or Masters Degree in Mechanical or Aerospace are encouraged to apply. Familiarity with CFD and experimental fluid mechanics is a requirement.

For further enquiries

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